

11th EDITION

monaco

BLUE INITIATIVE

28 | **09** | **24** | **2020**
MAY | **JUNE** | **JUNE**
D I G I T A L E D I T I O N

SUMMARIES & KEY MESSAGES

www.monacoblueinitiative.org



Launched in 2010 upon the initiative of HSH Prince Albert II of Monaco, the Monaco Blue Initiative (MBI) is a platform for discussion co-organized by the Oceanographic Institute, Prince Albert I of Monaco Foundation, and the Prince Albert II of Monaco Foundation. Its members meet annually to discuss the current and anticipate the future global challenges of ocean management and conservation. This event provides a valuable framework for fostering discussions between business, scientists and policy makers, and for analysing and highlighting possible synergies between the protection of the marine environment and socio-economic development.

The in-person meeting of the 11th Monaco Blue Initiative, planned for March 2020 in Monaco, had to be cancelled due to the COVID-19 outbreak. In a spirit of resilience and mobilization, HSH Prince Albert II of Monaco and the Steering Committee of the Monaco Blue Initiative wished to keep the momentum and offer a space for debate on the themes of the 11th MBI. The first-ever digital edition of the Monaco Blue Initiative took place through three online workshops in May and June 2020.

TABLE OF CONTENTS

Executive Summary	4
Key Messages	8
Welcome Address by HSH Prince Albert II of Monaco	12
WORKSHOP 1 – 28 May 2020 How can we place Marine Protected Areas and Other Effective Area-Based Conservation Measures at the center of international discussions and act collectively for their development?	16
WORKSHOP 2 – 9 June 2020 What lessons can be learned from community- led initiatives - and more generally by civil society - in the management and preservation of protected areas?	26
WORKSHOP 3 – 24 June 2020 How can the Blue Economy and sustainable management of the Ocean in the fields of tourism, transport, energy, fishing and aquaculture, be reconciled?	38
Closing Address	50
Acronyms	54
Participants	55
Acknowledgments	60
Co-organizers	62

The Monaco Blue Initiative held its 11th edition online for the first time, as the COVID-19 pandemic prevented a physical gathering. MBI is an annual platform for discussion on sustainable ocean management and conservation co-organized by the Oceanographic Institute and the Prince Albert II of Monaco Foundation.

The 2020 edition took the form of three webinars, held on May 28th and June 9th and 24th, with close to 200 participants hailing from Africa, the Americas, Asia, Australia, Europe and the Middle East. They represented a broad spectrum of activity, from government, international and civil society organizations to science, finance and business.

Going ahead with the MBI was an important statement of ongoing commitment despite the pandemic, which caused the cancellation or postponement of many negotiations and conferences scheduled for 2020, previously intended as a “super-year” for biodiversity and the oceans.

The webinars’ themes were Marine Protected Areas (MPAs), Community-Led Ocean Management Initiatives, and the Sustainable Blue Economy, respectively. HSH Prince Albert II of Monaco launched the series with a welcome address at the start of Workshop 1. Government representatives from France, the European Union, Chile and Norway also delivered speeches during the workshops.

WORKSHOP 1

focused on Marine Protected Areas and Other Effective Area-Based Conservation Measures (OECMs). Panelists highlighted the current status and future challenges of MPAs and OECMs, and explored the tools and opportunities for negotiation and action to advance marine conservation.

Broad consensus emerged around the need to move beyond previous targets with respect to Marine Protected Areas and achieve protection of 30% of the oceans by 2030. Climate change impacts and demographic growth add urgency, as they decrease ecosystem resilience and the ocean’s capacity to provide food and climate regulation.

Many platforms for increasing effective ocean protection exist at the local, national, bilateral, regional and international levels. A more holistic approach linking existing schemes and expanding them would be useful, and might generate more political will, the lack of which among some states has blocked protection in sensitive areas such as the High Seas, the Arctic and the Antarctic. The mobilization of civil society and public opinion can be a crucial driving force to pressure governments and international conventions to act.

Science has a key role to play in convincing governments, economic actors and the public of the need to act decisively, and in supporting policy-makers. Interdisciplinary research should be strengthened to enable proper assessment of marine biodiversity, ecosystem services, values and risks. Indigenous and traditional knowledge can contribute greatly to

natural science with regard to ocean conservation.

To be effective, Marine Protected Areas must involve, empower and benefit local communities in ways that are resilient to changing conditions. The COVID-19 pandemic has revealed the vulnerability of coastal communities overly dependent on a single MPA-related activity such as tourism.

Connectivity is another crucial element for MPAs, whether physically linking protected areas through water corridors or swimways to protect migratory and reproductive zones, or on the human level, by developing networks of MPA managers to share knowledge, build capacity, and present a united front to policy-makers.

Finally, sustainable sources of financing such as [The MedFund](#) environmental trust fund must be developed and diversified to ensure the long-term effective management, monitoring and enforcement of Marine Protected Areas. This is especially important for MPAs and other conservation measures in developing countries with limited financial resources.

WORKSHOP 2

explored community-led initiatives and civil society in the management and conservation of protected areas, with examples from Asia, Europe, Central America and North Africa. The importance of developing sustainable livelihoods in communities engaged in marine conservation was a strong focus.

The COVID-19 pandemic has starkly revealed the need for livelihoods that are diverse and resilient to global shocks, avoiding dependency on a single sector such as tourism. Artisanal fishing is a central activity; supportive markets are key to creating incentives for sustainable practices. This implies selling those fish that are ecologically available at a given time rather than the most valuable, coveted species.

Governments and international organizations can support community conservation initiatives by helping them to establish rights and obtain legal status. Official recognition and advocacy would make it easier for communities to enforce local measures and to attract financing, particularly in developing countries.

More generally, the international conservation community should view its role as facilitating locally led marine management rather than imposing protected areas on communities from outside. This is also a question of effectiveness, as MPAs that fail to respect local realities also fail at conservation due to a lack of buy-in.

Measuring, quantifying and communicating the risks and benefits of marine use and conservation can contribute

significantly to mutual understanding and foster more equitable and effective management. Participatory mapping exercises and surveys are one way to do this, with the added benefit of directly involving stakeholders.

Private philanthropy could be a useful source of funding for community-led conservation, especially at the early stages, but cannot be a substitute for a long-term self-sustaining model. Integrated Multi-Trophic Aquaculture can provide sustainable, conservation-compatible livelihoods as part of that model.

The COVID crisis presents both threats and opportunities. While it risks putting conservation on the back burner and enabling those trying to reverse environmental regulations, it is an opportunity to direct recovery funds to sustainable development and effective conservation. The many ocean-related negotiations and gatherings scheduled over the coming year provide occasions to embed community-led conservation in pending agreements.

In WORKSHOP 3

panelists from science, tourism, finance, and civil society organizations discussed reconciling the Blue Economy with sustainable ocean management. Science-industry partnerships, engaged tourism, ocean tech investment and seafood certification were highlighted.

The Seafood Business for Ocean Stewardship (SeaBOS) initiative brings scientists and the world's largest fishing and aquaculture companies together to move the industry towards sustainability. It has changed mindsets and increased acceptance of the sustainability concept, particularly in Asia. This science-business partnership model could be replicated to advance ocean stewardship in other areas of the Blue Economy.

Coastal and marine tourism is one of the fastest-growing and largest ocean-related activities, second only to industrial fishing. «Engaged tourism» is one way to build support for the oceans and coastal communities by involving tourists in beach clean-ups, coastal ecosystem restoration or citizen science.

Demand for low-impact travel is growing, according to the Ponant cruise line, whose sustainability strategy includes energy-efficient small ships, cleaner fuel, carbon offsets, onboard water and waste treatment, and local food sourcing. Scientists are invited to conduct research aboard Ponant's ships during cruises and to engage with passengers to raise their awareness of marine ecosystems.

A sustainable Blue Economy requires environmental justice and inclusive

governance to ensure that coastal communities benefit. New mechanisms need to be developed to ensure equitable sharing of intellectual property and marine technology, particularly in developing countries.

Meeting current and future challenges to sustainability requires massive investment. Venture capital firms are moving into the Blue Economy; Norway's Katapult has invested in 22 ocean tech startups from 14 countries to date. Examples from the UK, Costa Rica and Norway showcased innovative approaches to offshore construction, traceability for small-scale fishers, and low-impact Arctic tourism.

Fishing is central to the Blue Economy, providing much of humanity's protein and millions of jobs. Certification schemes like the Marine Stewardship Council empower consumers to make informed choices, reward fisheries that are sustainable and increase pressure on those that are not. Social issues in fisheries such as slave and bonded labour and killings of observers must also be addressed.

Stepping up scientific research into human, climate change and acidification impacts on the ocean will be critical to determining how to manage marine resources in the future. Meanwhile, it is necessary to ensure existing science is made available to and being used by decision makers, who must also show greater political will: the World Trade Organization has been discussing eliminating harmful subsidies to fishing for twenty years now, to no avail.

GOALS AND AMBITIONS FOR MARINE PROTECTED AREAS (MPAs) AND OTHER EFFECTIVE CONSERVATION MEASURES (OECMs)

- There is more than ever a need to move beyond previous targets set with respect to Marine Protected Areas and achieve protection of 30% of the oceans by 2030. Climate change impacts and demographic growth add urgency, as they decrease ecosystem resilience and the ocean's capacity to provide food and climate regulation.
- Lessons should be drawn from Aichi: new targets have to be unambiguous, measurable and based on reliable science, with clear baselines and data underpinning the monitoring and review of progress.
- In addition to quantitative targets, qualitative aspects such as ecological representativeness of protected sites, connectivity between sites, and minimum protection standards are critically important.
- We need strong political will to increase protection of sensitive areas and use available science to tackle issues such as climate change and overfishing. The mobilization of civil society and public opinion can be a crucial driving force to pressure governments and international conventions to act.
- Interdisciplinary research should be strengthened to enable proper assessment of marine biodiversity, ecosystem services, values and risks. Indigenous and traditional knowledge can contribute greatly to natural science with regard to ocean conservation.
- Connectivity is a crucial element for MPAs and OECMs, whether physically linking protected areas through water corridors or swimways to protect migratory and reproductive zones, or on the human level, by developing networks of MPA managers to share knowledge, build capacity, and present a united front to policy-makers.
- Sustainable sources of financing, such as The Medfund, must be developed and diversified to ensure the long-term effective management, monitoring and enforcement of Marine Protected Areas. This is especially important for MPAs and other conservation measures in developing countries with limited financial resources.
- While full protection of 30% of the oceans is critical, ultimately our collective goal must be 100% sustainable use of our oceans.



INVOLVEMENT OF CIVIL SOCIETY IN THE MANAGEMENT AND CONSERVATION OF PROTECTED AREAS

- To be effective, Marine Protected Areas must involve, empower and benefit local communities in ways that are resilient to changing conditions. The COVID-19 pandemic has revealed the vulnerability of coastal communities overly dependent on a single MPA-related activity such as tourism.
- Governments and international organizations can support community conservation initiatives by helping them to establish rights and obtain legal status. Official recognition and advocacy from governments and international organizations would make it easier for communities to enforce local measures and to attract financing, particularly in developing countries.
- To ensure effectiveness of local protection measures and community buy-in, international conservation organizations should have a facilitating role, and avoid imposing an external model which may not respect local realities. We need to look beyond traditional ways of working and traditional alliances and networks, and engage all stakeholder groups. Adequate financial resources and capacity-building support for developing countries will be crucial.
- Private philanthropy could be a useful source of funding for community-led conservation, especially at the early stages, but cannot be a substitute for a long-term self-sustaining model.
- While the COVID crisis risks putting conservation on the back burner and enabling those trying to reverse environmental regulations, it is also an opportunity to direct recovery funds to sustainable development and effective conservation.

RECONCILING THE BLUE ECONOMY WITH SUSTAINABLE OCEAN MANAGEMENT

- Science-business partnerships should be promoted and developed to encourage companies to act as stewards for ocean resources in the various areas of the Blue Economy.
- A sustainable Blue Economy requires environmental justice and inclusive governance to ensure coastal communities benefit.
- New mechanisms need to be developed to ensure equitable sharing of intellectual property and marine technology, particularly in developing countries.
- Robust and transparent certification schemes in Blue Economy sectors such as fishing or tourism should be encouraged and further developed as they help consumers make informed, responsible choices and encourage companies to engage in sustainable practices.
- The ingredients needed to move towards reconciling the Blue Economy with ocean health and that of local communities can be summarized as the «4 S»: speed, scale, science and a sense of stewardship»





HSB PRINCE ALBERT II OF MONACO

**Ladies and Gentlemen,
Dear friends,**

Throughout the first decade of the Monaco Blue Initiative's existence, we cultivated some good habits and we honestly thought that they would last a long time...

With the coronavirus crisis, we now need to change most of our habits. We must forgo the enjoyment of meeting physically, political and economic leaders, scientific and environmental players, to discuss issues we hold close to our hearts.

This new setup not only changes the nature of our discussions, with dialogue via interposed screens: it also modifies their content.

I think it is safe to say that our discussions and ideas will, for a long time, be greatly marked by the crisis we are currently experiencing. How could it be otherwise?

In just a few weeks, we have seen our world change. We have also seen our oceans change. We have seen our minds change.

And this change, however long it lasts, brings about one certainty at least: our world is not sacrosanct. We are even more vulnerable than we thought. And we are collectively capable of change, including extremely rapid change.

Consequently, I hope that this rather special edition of the Monaco Blue Initiative will take place under the banner of change. Change in how we work, of course. But more importantly a change in our attitude with regard to the marine environment and marine resources.

In this respect, I would like to broach a few important points which are on the agenda of our meeting.

Firstly, in regard to Marine Protected Areas, it is a case of considering them from a two-fold point of view.

An international point of view, which means their development and reinforcement, both in number and in nature, and this needs to be discussed in multilateral forums.

And a more local point of view: the way they are managed where improvements should be made and the need for greater involvement of the coastal populations concerned.

Underlying these considerations is a very real need to develop Marine Protected Areas much more efficiently than we have done so far.

I would like to remind you that ten years ago the international community pledged to place 10% of marine areas under protected status. Everyone agrees that we have not yet reached this target, while many consider even – and I share this opinion – that our target today should be 30% for the next decade.

And there are very real economic opportunities offered by Marine Protected Areas. As we know, this economic dimension is crucial to their success. And it justifies that the appropriate funds be allocated to them.

In this context, I am delighted that The MedFund, the trust fund we created with France and Tunisia to develop Marine Protected Areas in the Mediterranean, continues to grow.

Only recently we committed to funding amounting to 1.8 million Euros for the benefit of MPAs in Tunisia and Albania over the next 5 years. These funds will be allocated to local civil society organizations and national agencies in charge of protected areas. It will, I hope, give them the resources they need to ensure sustainable effective management practices.

The question we should also be asking is the efficiency of Marine Protected Areas.

You know as well as I do how protection measures differ from one place to another. In order for our action to have an effect, we need to guarantee the actual level of these measures.

And we need to adapt our conservation tools to the various ecosystems and threats they face more effectively, and to ensure better coordination between them.

I therefore hope that our discussions, will help us to identify operational perspectives in this respect.

The second point we will be discussing concerns more generally the implementation of a genuine Blue Economy, to reconcile the needs of humankind with those of the ocean.

To address these often conflicting challenges, I believe that the value of our work, once again, will come from our ability to look at things as practically as possible, basing ourselves on experiences and observations, not being afraid to speak of failures and weaknesses, as well as success stories.

“To know men, one must see them act” Rousseau wrote. This applies to our subjects as it does to others: to truly be aware of our relationship with the ocean and to hope to change it, we need to see how we act vis-à-vis the seas.

This is the whole point of this Monaco Blue Initiative. Engage all the players involved in dialogue, so that we can gain a better understanding of the issues that link the seas and humanity. And so that we are also able to assess the actions we have undertaken and those we need to initiate more effectively.

This is how we will be able to place the oceans at the heart of our development paradigm.

At a time when the coronavirus and its effects prompt us to rethink our world and compel us to change our priorities, I believe that these issues are still relevant today.

I am therefore delighted that this Monaco Blue Initiative is being held, despite the constraints.

And I would like to extend special thanks to you for agreeing to join us.

Thank you very much.



WORKSHOP 1

Held in the presence of HSH Prince Albert II of Monaco, this first workshop began with the welcome address by His Serene Highness and keynote speeches by Ms Brune Poirson, Secretary of State to the Minister for the Ecological and Inclusive Transition of France and Mr Virginijus Sinkevičius, EU Commissioner for Environment, Oceans and Fisheries.

Panelists from the Americas, Europe and Asia then discussed the current status, plans, objectives and challenges of MPAs and so-called “Other Effective Area-Based Conservation Measures (OECMs), and the local, bilateral, regional and international tools and possibilities for negotiation and action to advance marine conservation.



KEYNOTE SPEECH

Ms BRUNE POIRSON

Secretary of State to the Minister for the Ecological and Inclusive Transition, France

In her keynote speech, France's Brune Poirson called the COVID-19 pandemic a terrible reminder of the increase of human pressure on natural resources, species and habitats, which has undermined resilience and increased the risk of disease. However, the pandemic also provides an opportunity to highlight the necessity of protecting biodiversity.

France supports protecting 30% of land and oceans by 2030. With Costa Rica it is co-piloting the High Ambition Coalition to gather a critical mass of countries to support adoption of the 30% target in all upcoming international negotiations and events like the International Union for the Conservation of Nature (IUCN) Global Congress, the 5th International Marine Protected Areas Congress (IMPAC5) and the 15th meeting of the Conference of the Parties to the Convention on Biological Diversity (CBD COP15).

France is currently developing a national strategy for implementing the 30% target by 2022, with stronger protection measures for one-third. Increasing MPAs' surface and ensuring their effective management at a large scale is also important with regard to climate regulation, she noted.

While the High Seas account for more than 60% of global oceans, and represent many ecologically significant areas, the current 1.2% protection is clearly insufficient. France has submitted proposals to create two large-scale High Seas MPAs: the North Atlantic Current and Evlanov Seamount under the OSPAR Convention, and the East Antarctica MPA in the Southern Ocean, under the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR). These two regional seas conventions are the only bodies currently having a mandate to create MPAs in the High

Seas, which makes it crucial to conclude the future global agreement on Biodiversity Beyond National Jurisdiction (BBNJ).

The aftermath of the COVID-19 crisis can either push environmental issues to the background or pinpoint them as the causes of this health crisis and increase the will to address them. We have a collective political responsibility to make sure that the second solution prevails, Ms Poirson concluded.

KEYNOTE SPEECH

Mr VIRGINIJUS SINKEVIČIUS

Commissioner for Environment, Oceans and Fisheries, European Commission

European Environment, Oceans and Fisheries Commissioner Virginijus Sinkevičius also drew a parallel between the historic health crisis on land and that of the marine environment, upon whose health humans and the planet depend. Today's Monaco Blue Initiative comes just one week after the European Commission published its ambitious EU Biodiversity Strategy. It reflected the conviction that we cannot treat the biodiversity crisis in isolation or only at a national or sectoral level - human pressure such as overexploitation, pollution or global warming require a regional, even global, vision. Marine Protected Areas and other conservation measures are among the most effective ways to address both the biodiversity and climate emergencies at once.

Although the EU has achieved the Aichi and SDG 14 target of conserving at least 10% of coastal and marine areas by 2020, globally, marine protected area coverage reaches just 7.5%, with an even smaller percentage effectively managed, and close to zero protection in the High Seas. Scientists tell us we are approaching several tipping points, that 10% is no longer sufficient, and that unless we reach a certain coverage and proper connectivity between areas, MPAs will not be effective.

The European Commission's new Biodiversity Strategy proposes to increase the EU's network of Marine Protected

Areas and other effective conservation measures by 19% over the next ten years to achieve 30% by 2030, with a substantial part under strict protection. This year the EU will put forward guidance for identifying and designating additional areas, and for adequate management.

Achieving 30% will not be easy, especially now that the pandemic is taking a toll on economies and national budgets. It will require concrete commitment from Member States, supported by sufficient public and private funding. The EU must also reduce its overall footprint on the marine environment by managing land and Blue Economy activities sustainably, while using its international ocean governance policy to address global drivers of marine biodiversity loss.

An expansion of the MPAs to the High Seas is also necessary. The EU is involved in negotiations on an international legally binding instrument under the United Nations Convention on the Law of the Sea (UNCLOS), to conserve and sustainably use marine biological diversity in areas beyond national jurisdictions. Adoption of this instrument would be one of the most significant achievements in ocean governance of our times, Mr Sinkevičius said.

Next year's COP 15 of the Convention on Biological Diversity will aim to adopt a new Global Framework for Biodiversity and the EU will make sure the oceans are in the heart of discussions. Lessons should be drawn from Aichi: targets have to be unambiguous, measurable and based on reliable science, with clear baselines and data underpinning the monitoring and review of progress.

A global agreement must respond to the sensitivities of partners at the table, in particular developing countries. This includes the mobilisation of financial resources, capacity building, ensuring food security, and sharing benefits from the use of genetic resources. It also includes respect

for the rights and the full and effective participation of indigenous peoples and local communities, and all stakeholders, including women, youth, civil society, local authorities, the private sector, academia and scientific institutions.

Only strong multilateral cooperation and coordination, based on mutual trust and awareness of our common destiny, will enable progress on these issues in the interest of all.



PANEL DISCUSSION

How can we place Marine Protected Areas and Other Effective Area-Based Conservation Measures at the center of international discussions and act collectively for their development?

MODERATOR

Mr Jose Maria Figueres Olsen
Former President of Costa Rica
Co-founder and Board Chair of Ocean Unite

PANELISTS

H.E. Mr Serge Segura
Ambassador of France for the Oceans

Ms Sabine Jessen
Executive Director, 5th International Marine Protected Areas Congress Secretariat, Government of Canada

Dr Enric Sala
Explorer in Residence, National Geographic

Dr Atsushi Sunami
President, Ocean Policy Research Institute of the Sasakawa Peace Foundation

Ms Shirley Binder
National Director of Environmental Policy, Ministry of Environment, Panama & Edinburgh 2020 "Ocean Leader"

Opening the panel, moderator **Jose Maria Figueres Olsen** called for support for the target of 30% ocean protection by 2030, as science shows that is the minimum required to ensure the planet's temperature does not rise more than 1.5 degrees. He applauded the EU's Biodiversity Strategy for adopting that target and for pushing for the protection of the Antarctic, discovered 200 years ago. This year's anniversary provides an opportunity to honour it by protecting its entire surrounding ocean, he suggested. These challenging times offer many opportunities to make a very strong show for the oceans.

This was supposed to be the Year of the Ocean and Biodiversity but will go down

instead as the Year of the Pandemic, and the economic crisis will be severe, said France's Ocean Ambassador **Serge Segura**. He noted that most of the planned ocean events have been rescheduled, not cancelled, including the Our Ocean meeting in Palau, the 4th negotiation session on BBNJ, the CBD, the SDG14 meeting in Lisbon and the IUCN Congress in Marseille.

Action to promote tools of protection, of which MPAs are just one, can be taken at a variety of levels. Decisions can be taken on a national basis with respect to territorial waters or a country's Exclusive Economic Zone (EEZ), as long as they conform to the UN Law of the Sea. France's objective is to reach the level of 30% of protected areas by 2022, with 10% under a strict regime; all states can do this, Mr Segura affirmed.

Multilateralism with regard to biodiversity and protection of the ocean must be promoted. Existing tools developed by regional and sectoral organizations are effective and can be expanded, such as the "particularly sensitive sea areas" established by the International Maritime Organization (IMO) in significant zones at risk from shipping.

Regional fisheries management organizations, or RFMOs, are often criticized, but useful tools such as moratoriums and different fishing seasons can be developed within them by member states. Similarly, the International Seabed Authority's mining code has been delayed to allow the incorporation of tools to protect the ocean.

Segura expressed pessimism regarding work within original sea conventions such as Barcelona, Antarctica's CCAMLR, and OSPAR, where adoption of projects on the table is proving difficult due to insufficient political will among states. For years, states including France have been trying to find new ways, with many initiatives, coalitions and more. Perhaps there are too many - these coalitions should be joined up to be more powerful and efficient, he said.

Bilateral cooperation can be effective too, such as that of France with Japan on MPAs, and with India for capacity building and legislation in developing countries to create new MPAs. States must also work with civil society, which should be better represented in international meetings. Traditionally we think the international community is states and international organizations, but today civil society and public opinion have a role to play. No new ways of cooperating need to be installed however all can work if the political will is there.

Sabine Jessen has 25 years of experience working on MPAs in Canada, first with the Canadian Parks and Wilderness Society NGO (CPAWS) and now as a civil servant spearheading next year's IMPAC5 in Vancouver. Like the EU, Canada is strongly promoting the broad adoption of the target of 30% ocean protection by 2030.

All progress requires political will, a clear roadmap, and explicit targets. Canada was long stalled at less than 1% protection of its ocean until 2015, which brought new commitment and a clear plan to achieve the Aichi target. Civil society played a critical role, including her organization, which recommended an approach and mobilized public support for Marine Protected Areas. Canada's strong budgetary effort and civil service was also key to progressing to the current 14% ocean protection. This

represents 800,000 km² of Canada's Arctic, Atlantic and Pacific sea and coast.

Canada has also passed new legislation to support MPA effectiveness - prior to this, there were no minimum protection standards for MPAs. In response to a civil society complaint, national standards were developed, resulting in a blanket prohibition of oil and gas development, bottom trawling or dumping across all Marine Protected Areas. This took a 20-year fight, Ms Jessen noted.

Canada was a pioneer in using Other Effective Conservation Measures, with international guidance from the IUCN Taskforce and the CBD. Alongside MPAs, it's a very important tool to protect areas that might not fit the definition of a protected area but still make effective contributions to biodiversity conservation.

Indigenous peoples and traditional knowledge have an important role to play alongside science as we define and manage MPAs and move towards a 30% coverage. Canada is working with indigenous peoples to ensure new MPAs form the basis of strong local economies and hopes to showcase some inspiring examples of indigenous MPA leadership at IMPAC5.

Canada will host IMPAC5 in Vancouver in 2021 with the IUCN and CPAWS. It will have a strong virtual component to enable the participation of people from every corner of the world. The gathering will celebrate and learn from past achievements and work to develop a global roadmap to reach that 30% goal.

Enric Sala is founder and leader of Pristine Seas, the National Geographic Society's largest exploration, research and conservation project acting to protect the oceans' last wild places. It has worked

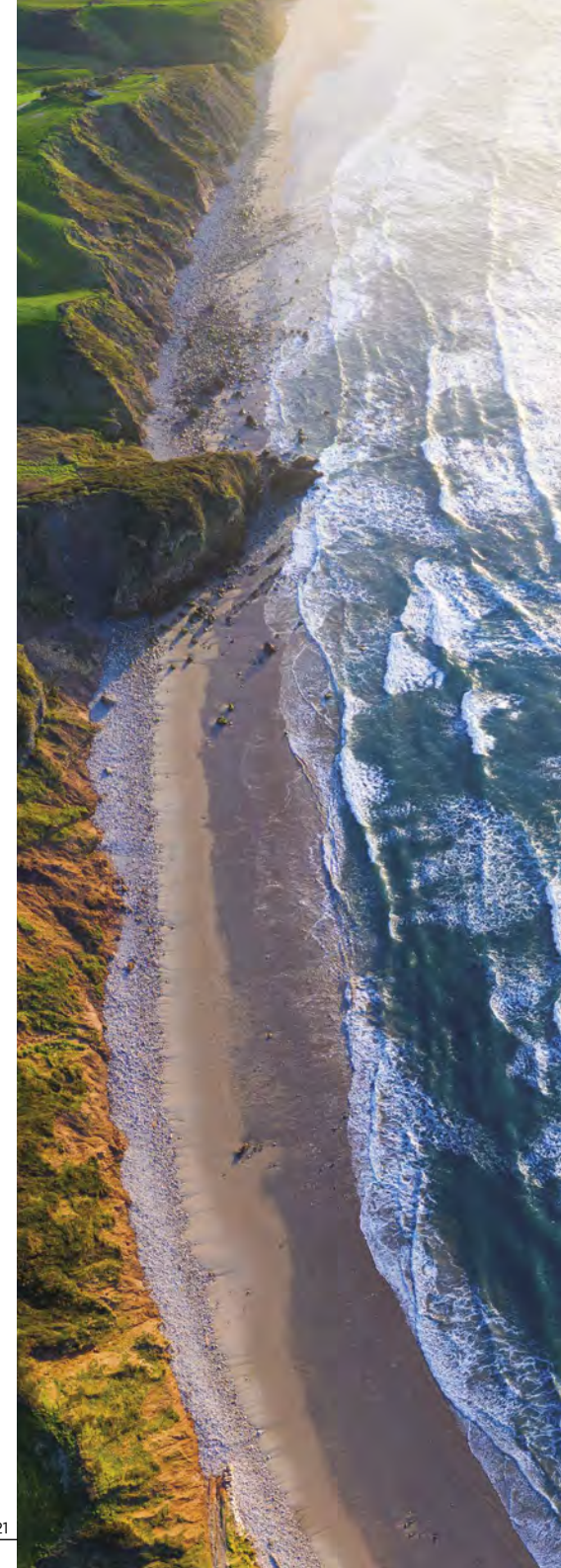
effectively for ten years now with partners, communities and governments to create 22 of the world's largest MPAs, of which 21 are fully protected no-take areas.

This has changed the social norms, Dr Sala noted. Ten or fifteen years ago, it would have been inconceivable for country leaders to brag about banning extractive activities in large areas of the ocean. But now it has been shown to be economically beneficial, and there is healthy competition among country leaders to create protected areas.

Today, with the COVID pandemic, we hear that the environment is not the priority; we need to take care of people and the economy. This is essential, but we mustn't forget the origin of this pandemic, which is our broken relationship with nature, making fully protected MPAs even more important. Many people don't understand that to get more from the ocean you have to protect it strictly: research shows that protected Marine Protected Areas' economic value is at least four times that of protected areas allowing fishing.

Dr Sala points to the example of countries that have already shown the 30% target is possible. Working with Pristine Seas, Palau has strictly protected 80% of its waters; Seychelles, 30%; Niue in the South Pacific, 40%.

Chile, a major fishing country, has gone from less than 1% of its Exclusive Economic Zone in fully protected MPAs in 2010 to 24% today. They realized there was no future for their coastal economies or for fishing if they didn't set aside areas to help replenish the rest of the ocean, Dr Sala explained. What we have seen with these countries is leadership; they are showing the way, and this makes me hopeful that 30% is possible, he concluded.



Atsushi Sunami of the Sasakawa Peace Foundation's Ocean Policy Research Institute (OPRI) is also a former member of the Arctic Circle Advisory Board. Scientists play an important role in support of scaling up MPA protection to the proposed level of 30% and should work to promote this at the highest level of decision-making, he affirmed. When Japan hosted the G20 summit in 2019 scientists worked with the government to put the ocean and Illegal, Unreported, Unregulated (IUU) fishing, marine plastics and blue carbon on the agenda to be discussed as priority issues.

Japan is collaborating with scientists in Saudi Arabia ahead of the Riyadh G20 scheduled in November. We need to keep pushing ocean issues as a priority agenda for international summit meetings to get leaders to agree on the ambitious post-Aichi target and to reaffirm the political commitment to adopt the BBNJ agreement.

The science and policy interface is key to supporting high-level decision-making and policy based on scientific evidence, with the precautionary approach as the guiding principle. Regarding MPAs or other area-based management tools we need proper assessment of marine biodiversity, ecosystem services, and the values and risks. The UN Decade of Ocean Science for Sustainable Development, starting next year, provides a useful platform for us to strengthen interdisciplinary scientific research and promote international cooperation on capacity development.

Standardizing monitoring methods is one important task and we need to promote the use of multiple technologies including satellite data, aerial and underwater drones, supersonic waves and infrared radiation for ocean visualisation, and to disclose the information, Dr Sunami suggested.



He called for a holistic, comprehensive approach linking existing schemes, such as ecologically or biologically significant marine areas (EBSAs) or vulnerable marine ecosystems, uniting Regional Fisheries Management Organizations (RFMOs), the International Seabed Authority, the IMO, and the Arctic and Antarctic. The High Seas MPAs developed by CCAMLR set a useful example.

The scientific community's promotion of research and data sharing will play a vital role in bringing major stakeholders including China, Russia and others into constructive discussions, particularly as far as Asia is concerned. This was crucial to establishing the Arctic fishing moratorium in 2018. The international regime for the Arctic created a basis for scientific assessment, which led Arctic Council members and observer states Japan, China and South Korea to agree upon the ban, Dr Sunami noted.

We should also relate this to World Trade Organization negotiations towards eliminating harmful subsidies to overfishing and IUU fishing. OPRI is engaged in dialogues to contribute to high-level decision-making and affect policy implementation and hopes to host the Arctic Science ministerial meeting and the Arctic Circle Japan Forum in Tokyo in 2021 to advance the dialogue with Arctic stakeholders.

Regarding its bilateral and regional initiatives, Japan has had dialogues with China and East and SE Asian countries concerning the Pacific, with France on policies for achieving sustainable oceans, and recently with various African countries on MPAs and ocean management at the Tokyo International Conference on African Development (TICAD). It is also working with the government of Palau to prepare the Our Ocean conference in December, where Japan will discuss how to effectively implement MPAs around the South Pacific.

Marine biologist **Shirley Binder** is Panama's National Director of Environmental Policy and an Edinburgh 2020 Ocean Leader. She has worked on MPAs both in government and within civil society organizations.

Panama has almost 14% of its waters under MPAs but needs to change how they are created and implemented by involving and empowering more coastal communities and showing them how the proper creation of MPAs will benefit them economically. This applies around the world. A concept like the 'Rights of the Ocean', often referred to in the BBNJ negotiations, is hard to implement if we can't show how people will benefit. Relating ocean rights to communities and people helps, for example by showing how implementing conservation measures in the High Seas will benefit coastal fishermen affected by the giant fleets fishing the High Seas.

MPA creation or enlargement needs to be based on science and proof it will benefit a community. This is difficult as the benefits take time to appear. In Panama and much of Latin America people in coastal zones are not highly educated so we as the government need to empower and educate them with this information, Ms Binder said.

Before the COVID pandemic, tourism in Panama's MPAs was increasing, and had shown many coastal communities how large protected areas such as Coiba National Park were bringing economic benefits. Many former fishermen are now tour guides, she noted. But this is under the threat from the coronavirus as tourism will not re-start for a while; Panama was in complete lockdown till June 1st.

Panama's environment ministry has given Community-Based Organizations legal status to work together with it on implementing MPAs to reconcile

sustainable tourism with protection. If, as in Coiba National Park, the community sees the benefits, they will take care of the protected area. We could have thousands of policemen and park rangers but if the community isn't on board, protected areas won't be effectively implemented.

Ms Binder stressed the importance of connectivity among MPAs of international significance. Panama's Coiba National Park is part of the Eastern Pacific Tropical Corridor, along with Costa Rica's Cocos Island MPA, that of the Galapagos in Ecuador and Malpelo in Colombia. These are core areas, but the migratory routes between them are not as protected.

In recent years science has been studying species' behavior and movement to inform fisheries management and the establishment of more areas of protection, such as Panama's new protected swim way connecting Coiba with Colombia's Malpelo. Panama has started conversations with the government of Colombia to share management, knowledge and best practices. This is important, to avoid reinventing the wheel and reproducing errors other countries may have made in the past.

If Palau does hold the delayed Our Ocean Conference this year, the next one will be in 2021 in Panama, whose economy is based on the ocean and the Panama Canal. It is directly affected by climate change, as new shipping routes open up due to the Arctic melt. Panama successfully pushed for oceans to be included in the texts during the last COP 25, Binder noted; though the language was a little weak it was a first step towards recognition of the oceans as the main climate regulator.

The panel was then opened to discussion. Executive Secretary of the Convention

on Biological Diversity **Elizabeth Maruma Mrema** recalled that area-based conservation - including MPAs - has long been a major focus for the parties to the Convention, as the most effective tool for protecting biodiversity, ecological function and services.

Target 11 has been one of the most successful Aichi targets, with more than 17% of national waters and roughly 7% of global oceans currently designated as protected areas. We still have time to fully achieve the 10% quantitative element of Target 11 and of SDG 14 but also the qualitative elements, including ecological representativeness, effectiveness, equitable management, and connectivity, she affirmed.

Now the Parties are negotiating the post-2020 Global Biodiversity Framework to reverse the negative trends in biodiversity loss. This must incorporate ambitious targets and goals for ocean conservation while ensuring oceans can continue to support livelihoods, food security, economic growth and social well-being.

To realize our ambitions for area-based conservation we need to look beyond traditional ways of working and traditional alliances and networks, and engage all stakeholder groups. It is hoped that there will be adequate financial resources and capacity-building support for developing countries, as many are currently unable to effectively implement area-based protection. Paper parks will not change the tide for the ocean, she concluded.

Harriet Harden-Davies, a researcher with the Nippon Foundation's Ocean Nexus Program and a 2020 Edinburgh Ocean Leader, leads an international scientific delegation to the UN BBNJ process and had several reflections to share ahead of the fourth and final round of negotiations.

The revised draft text of November 19th reflects astonishing progress - in States aiming to serve as ocean "stewards"; in proposing institutional and funding mechanisms to establish MPAs and conduct environmental impact assessments; and even the contentious issue of marine genetic resources, with a shift from a focus on commercialization to conservation, emphasizing capacity building and technology transfer.

These are key achievements, but several areas call for further discussion and a strong role for science. One is the development of concrete mechanisms for capacity building that can enable equitable participation of all states and incorporate the needs of developing countries. Second is identifying how to share science to overcome the remaining hurdles on marine genetic resources. Thirdly, we must advance knowledge to better understand the role of High Seas MPAs in tackling climate change and associated threats like ocean deoxygenation. Linking natural science and indigenous knowledge is important in that regard, Harden-Davies suggested.

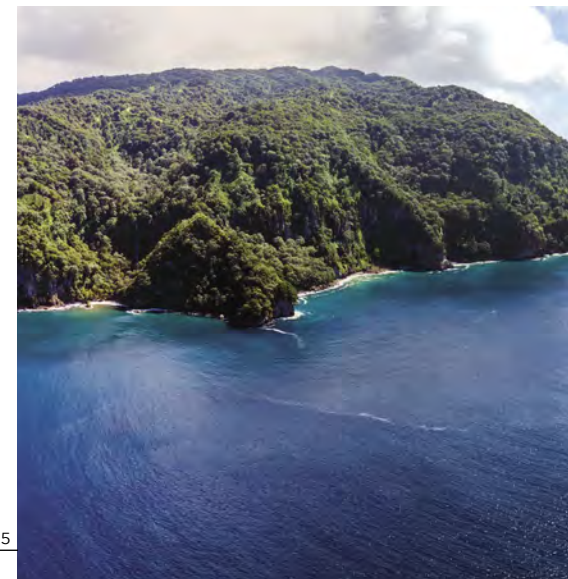
We could also consider novel approaches, such as Rights of Nature laws, to move towards effective conservation of the 2/3rds of the ocean that lies beyond national jurisdiction and ensure equitable outcomes for people. Meetings and intersessional dialogues such as this are critical to maintain momentum, share views, develop proposals and build ambition at this crucial stage in the BBNJ negotiations.

Executive Secretary of the Mediterranean MPA managers' network **Marie Romani** shared a message from MedPAN's President, Purificació Canals, emphasizing the importance of effective management and adequate, sustainable financing of MPAs to ensure meaningful protection.

Management means adequate human and material capacity as well as skills, and requires effective operational tools such as MPA manager networks like MedPAN, while The MedFund environmental trust fund is an example of how financing can be secured.

Existing national, sub-regional and regional networks in the Mediterranean and other Regional Seas are successful in gathering MPA managers facing the same challenges. They foster creativity, problem-solving, capacity building and the sharing of resources among MPAs, and enable the necessary linkages between MPA actions at the local level, and decision-making processes related to MPAs at national, regional and International levels.

Acting collectively is needed more than ever to face ocean challenges. In the years to come, building marine communities that connect planners, managers, decision-makers, scientists, civil society, donors and stakeholders - especially small-scale fishers - will be key to working towards healthy, sustainable ocean and coasts, she concluded.



WORKSHOP 2

The Second online workshop of the 2020 Monaco Blue Initiative began with a keynote speech by Mr Andrés Couve Correa, Chile's Minister for Science, Technology, Knowledge and Innovation. Panelists from Latin America, Europe and Asia then discussed their experiences with community-led conservation and offered recommendations for reconciling marine protection with sustainable livelihoods and economic activity.



KEYNOTE SPEECH

Mr ANDRÉS COUVE CORREA

Minister of Science, Technology, Knowledge and Innovation, Chile

In his keynote speech, Andrés Couve Correa recalled that the Ocean – central to Chile's identity – provides food, fuel, trade routes, recreation, tourism and scientific knowledge. It is our responsibility to sustain it for future generations.

Local communities were instrumental to establishing Chile's MPAs, which cover 43% of its Exclusive Economic Zone and include the Easter Island MPA, Latin America's largest. Covering 5.79 million km², it began as a petition to government from the local citizens' council, formed in 2015 to structure conservation and sustainable use of Easter Island's ecosystems.

The resulting MPA is administrated by a joint council of Chilean Government and Rapa Nui community representatives. Species protected include blue, humpback and minke whales; the bottlenose dolphin; the mango shark, and many species of fish and birds. As a Multiple Use area, it allows activities including artisanal fishing, tourism, and research.

The Juan Fernández Archipelago is another example. In the 1980s, the local community established rules to protect the prized Juan Fernández lobster, regulating capture techniques, minimum size, and seasons. When industrial fishing became a major threat in the early 2000s, universities and NGOs joined forces with local fishermen to successfully petition for legal reform to ban it from protected areas. Starting in 2014, several protected areas were created in the Mar de Juan Fernández and today cover over 262,000 km².

Effective management of MPAs remains a challenge. Chile's Ministry of Science is developing a Climate Change Observatory to gather data to facilitate evidence-based policy-making, and ocean observation and monitoring will be one of its main components.



PANEL DISCUSSION

What lessons can be learned from community-led initiatives - and more generally by civil society - in the management and preservation of protected areas?

MODERATOR

Dr Grethel Aguilar

Acting Director General, International Union for Conservation of Nature

PANELISTS

Prof Divya Karnad

Assistant Professor of Environmental Studies, Ashoka University, Founder InSeasonFish, Republic of India

Mr Adam Miller

Co-Founder and Executive Director, Planet Indonesia & Edinburgh 2020 “Ocean Leader”

Ms Esther Wolfs

Partner & Founder, Wolfs Company, The Netherlands

Mr Marco Lambertini

Director General, World Wildlife Fund International

Ms Haydée Rodríguez Romero

Vice-Minister Water and Seas, Government of Costa Rica

Moderator **Grethel Aguilar** of the IUCN opened the panel by noting that the Monaco Blue Initiative's going ahead online sent a clear signal of continuing support for the ocean agenda despite the COVID-19 pandemic.

Coastal communities know that natural infrastructure and fisheries must be protected for them to prosper, and possess a wealth of knowledge and practices to enable that. They were already facing challenges such as plastic pollution and climate change; now, they are also confronting the health and socio economic effects of COVID-19, Dr Aguilar said.

Oceans must be part of the global recovery. The IUCN backs the expansion and networking of MPAs that engage local communities as the only sustainable path to healthy oceans and thriving societies.

Professor **Divya Karnad** teaches and conducts research at India's Ashoka University. She co-founded India's first sustainable seafood initiative, InSeasonFish. It assists small-scale fishermen to increase fisheries' sustainability while working with supply chains and consumers to develop supportive markets for their catch.

The global conservation community must do more to recognize and validate local and indigenous conservation strategies, especially in developing countries. While in the developed world Marine Protected Areas typically depend on government decree and enforcement, this may not fit the reality elsewhere. Most of India's 133 state-declared MPAs are mere “paper parks” because the government has not been able to allocate the funding, training and technology needed to enforce them effectively.

In these contexts, MPAs may have to take different forms, Ms Karnad suggested. Her research and that of others working in the global south found that fishing communities were well versed with the spirit of protected areas but had their own ways of implementing them. In India, for example, small-scale or local community protected areas used a mix of strategies such as temporal fishing closures, spatial closures, or partial closures to certain types of fishing gear.

Unfortunately, these Community Marine Protected Areas, or CMPAs, were seldom recognized nor discussed at the global level. An important first step would be to help them to gain legal status – in India, fishermen have even been threatened with legal action for implementing protection measures.

Secondly, the COVID-19 pandemic has shown that communities need diversified livelihoods that are resilient to global shocks – sole dependency on tourism, for example, cannot be the way forward. This also requires supportive markets. Fishermen who adhere to community fishing closures have to catch whatever is ecologically available rather than going after the most valuable fish, but may have difficulty selling their catch.

InSeasonFish helped to shift market behaviour by working with supply chains, restaurants and consumers in support of sustainable fishers. Beyond this, there needs to be a concerted global effort to ensure markets feature ecologically determined rather than demand-driven harvests; this involves fishing management, supply chains and even diets and cultures.

Finally, providing income support may be a worthwhile investment for ocean conservation and wellbeing in poor coastal communities. In the first two weeks of India's two-month COVID-19 lockdown, supply chains broke down and small-scale fishers were unable to sell their catch, bringing some of the poor communities Karnad works with to the point of starvation.

Her team initiated a relief effort alongside state-provided rations. Once fishing was re-opened, many maintained closures of their own accord because they knew they could survive. This shows that for owner-operated fishing vessels, some kind of financial provisioning or Universal Basic Income could be a useful tool to increase community buy-in for MPAs.

Adam Miller is the Co-Founder and Executive Director of grassroots nonprofit Planet Indonesia. It fosters inclusive conservation, working with coastal communities to enable them to sustainably manage marine and coastal resources. He made three recommendations based on the organization's work within village-led partnerships that benefit over 17,000 people.

Firstly, the conservation community must prioritize participation of local communities, both as a means to an end but also as an indicator of success in and of itself. Successful marine conservation depends on the engagement of, and leadership by, local communities. Marine initiatives can no longer be designed in offices in Washington DC and then pushed on the communities of the global south.

Mr Miller's second recommendation concerned governance. The development of local, inclusive governance structures is key to the success of community-led conservation. These can be community groups, cooperatives, management associations and other platforms for decision-making and management. Such structures are crucial for mobilizing individuals and communities at a local level, but also for collaboration with state and other actors.

Planet Indonesia's work has shown that to be effective, we conservationists should view our role as facilitating a locally led process rather than implementing one ourselves. Another lesson is that gender issues and gender equality must be central to all community-led conservation initiatives.

Thirdly, the global conservation community must rethink design. This means moving beyond a system of large multinational NGOs whose impact is to self-replicate, towards a system that identifies local partners, local civil society organizations and on-the-ground

entities and supports them in their marine resource management and conservation effort.

Planet Indonesia begins all projects by asking communities themselves to define sustainability, conservation, wellbeing and development. Definitions may be different than those accepted internationally; in many ways these are western colonial terms imported to the global south, he said.

The COVID-19 crisis has further revealed the vulnerability of MPAs that are not community-led and locally sustainable, as across the global south their international staff has been sent home, patrols are no longer active, and tourism has collapsed.

By revealing our failure to correctly and fairly involve communities in marine resource management, the pandemic is an opportunity for self-reflection. The new normal must be that we cease the endless top-down versus bottom-up debate among conservationists, and focus on impactful, inclusive solutions hand-in-hand with coastal communities. The future relevance of the field of marine conservation depends on it.

Esther Wolfs founded Wolfs Company to measure and communicate the benefits of investments in sustainable development and nature conservation. Working mainly in the Caribbean, it helps to balance the interests of communities, governments, civil society and the private sector by increasing transparency regarding trade-offs in the use and management of ecosystems. By contributing to mutual understanding, it can foster more effective and equitable marine use and conservation.



The entire sea around Bonaire is a marine protected area. As a famous diving spot, the island's waters are its biggest draw, and tourism is Bonaire's most important economic sector, providing 38% of its GDP. Islanders were aware of nature's contribution to their wellbeing, but concrete action to conserve the marine environment was poorly supported, leading to the deterioration of coral reefs.

Quantifying the local economy's dependence on healthy reefs made it tangible: a valuation showed that Bonaire's coral reefs were responsible for 74% of the added value in the tourism industry. As a result, the Dutch government allocated 7.5 million Euros to nature conservation in the Caribbean. Tourism actors, the local community and nature conservation organizations began collaborating on marine conservation initiatives, such as banning damaging sunscreen.

In a similar study of the socio-economic value of Aruba's marine and coastal ecosystem, 400 community members took part in a participatory mapping exercise identifying locations with high aesthetic, cultural and recreational value. This revealed a conflict with the government's plan to develop an area the community valued for its natural environment. Locals took this up with government and their concerns have now been incorporated in a revised spatial development plan.

The Cayman Islands offer another example. A large-scale survey demonstrated local support for increasing the Islands' Marine Protected Areas, as a majority of Caymanians valued recreational activities such as swimming, beach-going and diving and considered a pristine natural environment central to their cultural identity. After years of research and close cooperation between the local government, citizens, NGOs and economic groups such as fishermen, the marine park areas were expanded.

Ms Wolfs also shared an example of balancing private sector business interests with those of a community. Her company analyzed the impact of a salmon farm in southern Chile on the surrounding marine environment and communities, revealing that local fishers attributed the decrease in their catch to the salmon company's activities.

Before the analysis, the aquaculture business thought it had a good local reputation because it sponsored many community events and programs. Thanks to this new understanding, it changed its strategy and invested in marine conservation in collaboration with the community, resulting in more effective efforts to protect the ecosystem.

COVID-19 is having a serious impact on conservation and the management of protected areas. Collaboration between the public and private sectors is crucial to steer economic recovery funds and measures towards sustainable development. Long-term dedicated entities such as The MedFund Mediterranean conservation trust have an important role to play in this regard, she concluded.



Marco Lambertini of WWF International then offered the perspective of an international NGO working with communities on MPAs and ocean conservation. WWF is more a federation of local organizations, operating under local governance and leadership, he noted.

The sustainable management of marine coastal resources is key to achieving sustainable development goals. This involves many different stakeholders, interests, contexts and histories, and often leads to conflicts. It takes place within a complex and diverse socio economic reality, from traditional governance systems in more remote areas to urban zones of high population density or high immigration flows.

Coastal resources have suffered steep decline particularly over the last few decades, and sometimes at the hands of local communities. Many communities themselves go through a journey of discovery from overexploitation to awareness and understanding, and then to an element of commitment and change.

Two elements are necessary to support that process of change. One is the recognition of rights. This is easier in places where traditional governance is able to balance those rights between community needs and marine conservation, but when that breaks down it's more difficult. Then the establishment of rights requires a concerted effort at the community, local and sometimes national level. International organizations and even business can help to support, facilitate, advocate, and broker relationships.

On Indonesia's Koon Island in Maluku, under strong traditional governance, the local community applied measures after seeing a decline in fish yields. They regulated seasons and techniques, while diversifying their economy. An older example is the Tuscan Archipelago National Marine Park where the local community obtained exclusive fishing rights.

In Tunisia's Gulf of Gabes, home to the largest continuous expanse of Posidonia seagrass, the community also took action in response to a decline in fish stocks, due mainly to competition from industrial fishing, by pushing the government to designate no-take zones surrounded by community-managed fishing areas. This has produced a visible increase in yields and now the Tunisian example is being replicated in other areas, in a country that has not yet designated any MPAs by law.

So clearly, when local communities take the lead and embrace conservation, the impact is far-reaching and lasting. Next year a lot of important agreements will be reached globally. This is an opportunity to embed concepts like community-led conservation in those agreements and perhaps to attach specific targets to those concepts as part of the overall vision of a carbon-neutral and nature-positive world, Mr Lambertini suggested. The opportunity to incentivize, promote and recognize these efforts in community-led marine and terrestrial conservation is one we cannot miss.

Minister **Haydée Rodriguez Romero** has broad experience working with MPAs and communities in Costa Rica and is now leading its ocean work. Ms Rodriguez began by noting that the COVID pandemic has exposed social inequalities but has also shown humanity's potential to work together to overcome crises and build a sustainable future that leaves no one behind.

Costa Rica is working on its Caribbean side with its first community-led MPA that incorporates the climate change variable while serving as a buffer against excess tourism and fishing activities.

Several elements are key to reconciling conservation and sustainable use to ensure ocean health, productivity and resilience. First is marine spatial planning to determine

how activities are allocated within Exclusive Economic Zones, and linking that to areas beyond in the High Seas. Secondly, we need sound environmental impact assessments. A key challenge is to translate scientific information into public policy but also into common knowledge.

Catalyzing investment to finance conservation is key to creating a balance between use and protection of marine resources. Currently investment in nature is less than 3% of climate finance, which is not acceptable. Any economic recovery from now on should include sustainable and nature-positive initiatives, Ms Rodriguez said.

Costa Rica is working with communities to create MPAs and to develop business plans for them based on tourism and sustainable fishing. But we also need to create fully and highly protected areas – that's the only way we'll be able to keep oceans healthy for future generations. Costa Rica is leading the High Ambition Coalition for Nature and People together with France to achieve 30% protection of the planet's oceans and land by 2030.

HE Mr Bernard Fautrier, Special Advisor to HSH Prince Albert II, began the discussion period by noting that Monaco also supports the High Ambition Coalition and all initiatives to improve the role played by MPAs everywhere.

Next up was **Dan Laffoley**, Marine Vice Chair of the World Commission on Protected Areas, who stated that future impacts from climate change would be as massive a shock to the global system as COVID-19. He called for MBI members to put together an action agenda and contact the Convention on Biological Diversity, the World Bank and others with five specific, new recommendations of what should be done differently to achieve a Blue-Green recovery and strengthen the resilience



of MPAs and local communities as we emerge from the pandemic. This means moving beyond general recommendations, such as financing.

Haydée Rodriguez suggested working more with mangrove and coral reef restoration, and developing future MPAs based solely on climate change mitigation. It is also important to adopt a Blue Economy model involving all communities in the allocation of ocean activities, identifying the benefits and ensuring all activities respect very strict and sound policies.

COVID-19's impact is not equal across regions and classes, highlighting the need for more equitable and direct access to resources and benefits. These lessons should be applied to climate change, as it will present many other crises. Decarbonisation is one good way to change the unsustainable way we've lived all these years, she said.

Esther Wolfs called for helping MPA management to gain a more solid understanding of financials and to diversify their sources of income, so as to not be solely dependent on tourism, for example. Conservation trust funds should be vehicles to offset any sudden drop in income, and should be approached about setting this in motion.

Marco Lambertini responded to Mr Laffoley's question with what he termed "a few no-brainers". The first is to curb wildlife trade and consumption as fully and fairly as possible. This situation came from that and it is bound to happen again if behaviour doesn't change.

Secondly, it is critical to fight back against attempts to deregulate- there's a very strong push from lobby groups and some regressive political forces to actually use this opportunity to roll back environmental standards. That's unacceptable and we should oppose it as much as possible.

More positively, there is an opportunity to fast-track green investment, as hundreds of billions of dollars in recovery funds will be invested in the next six to eight months. This is a real opportunity to remove perverse subsidies, support sustainable community-based artisanal fisheries, and look at infrastructure development in ways that don't harm the ocean. This is an opportunity we will not have again - hopefully - for some time, and one some decision-makers are beginning to take, he said.

Planet Indonesia's Adam Miller recommended urging large multilateral organizations to recognize community-based marine protection schemes. Failing to validate community-led conservation measures such as those based on indigenous law makes it hard for them to attract donors, who only want to fund state-led MPAs even when Locally Managed Marine Areas (LMMA) are more effective. He experienced this with an LMMA in Kalimantan next to an "official" MPA. Large donors and government agencies declined to fund the LMMA, despite fish biomass and livelihoods being considerably higher than in the MPA.

A related recommendation is to work more with supply chains to sell seafood sourced from LMMAs at a premium, giving communities a constant source of funding to manage protected areas without depending on donors.

Divya Karnad agreed: we have plenty of tools, but their broader adoption is being hindered by this lack of recognition. She suggested working to bring stories of locally grounded action to the ears of multilateral organizations. Secondly, the conservation community must stand its ground at a time when many entities are pushing to reduce environmental norms and change policies.



Grethel Aguilar mentioned a recent essay the IUCN drafted with WWF and Queensland University on how communities and protected areas are being impacted by COVID. Many organizations are trying to highlight challenges communities are having globally, and aid must go in that direction.

Masanori Kobayashi from Japan's Ocean Policy Research Institute asked Marco Lambertini to enumerate the success factors for building consensus on marine spatial planning or MPAs based on his experience with the Tuscan MPA that granted exclusive fishing rights to the local community.

Inclusivity is key, Mr Lambertini replied, which implies a long consultation. The Italian government had a clear commitment to conserve these areas while favouring development of the small local fishing community. It is also important to build on the data this experience is providing: while only local fishermen can fish within the marine park, it has become a nursery replenishing fisheries outside the park, spreading the benefits beyond the local community.

There is no single rule, as every context is different, but the evidence that granting particular rights and responsibilities to support local communities benefits other constituencies is getting stronger and stronger. That should be a strong argument in favour of those decisions.

Hemant Sondhi of Monaco-based Scorpio Ship Management asked about the possibility of philanthropists “adopting” MPAs to support their sustainability and that of the livelihoods of local coastal communities.

Adam Miller noted there were terrestrial examples of long-term financing involving philanthropists and the private sector elsewhere but that Planet Indonesia had not been able to get philanthropists to support LMMAs. As a result, it has developed alternative ways to finance community-led protection schemes such as working with supply chains to obtain a premium for LMMA-harvested mud crabs while working at the community level to ensure some of that profit is used to manage the LMMA.

In Marco Lambertini’s experience, philanthropy has been critical to kick-start a particular approach, whether an MPA or Locally Manage Marine Area (LMMA). But support must lead to a self-sustaining model for the long term because dependency on philanthropy is never a good long-term recipe.

Grethel Aguilar listed three elements with which philanthropy must comply: respect the rights and perspective of local communities, respect the country’s procedures and laws, and invest in communities for the long run. Short-term, one-shot support rarely works well.

Divya Karnad noted that any philanthropic “adoption” requires investing not just financially but in getting to know the community and the entire system you’re investing in. This is essential to ensure donors understand what results can be expected, and that they can meet expectations. If those conditions were met, this type of investment could be of great benefit.

Thierry Chopin from the University of New Brunswick suggested that Integrated Multi-

Trophic Aquaculture could provide sustainable livelihoods compatible with MPAs, as shown by several concrete examples from the Global South. Echoing Adam Miller about MPAs being an imported colonial concept, Chopin suggested the Global North should modify its attitude and learn from these examples.

COVID-19 is showing the importance of local coastal communities developing resilience with long-term, sustainable commitments and diversified sources of revenues. This makes the case for flexible MPAs rather than rigid structures closed 12 months of the year, and for a complete revision of existing funding and subsidy schemes, he said.

Adam Miller noted that community-based conservation was now being adopted more globally as a viable solution. Rather than debate whether top-down is better than bottom-up, the marine community should unite and focus on which enabling conditions on the ground or at government level determine the type of protection that will work best in a given context, whether a state-led MPA or a community-led scheme. I hope and think we’re moving on; today’s conversation is an indicator that change is starting to happen, he said.

Before concluding the workshop, moderator Grethel Aguilar noted that while gender equality had not been discussed in depth, it must be a priority when working with coastal communities, where women are doing a lot of the work. These women need support to have a voice and be a visible force.

She noted that in some ways, thanks to online technology, COVID-19 has produced more dialogues among ocean actors than ever before, so this year may yet be a powerful one for marine conservation. The IUCN fully supports France and Costa Rica’s High-Ambition Coalition backing the 30 by 30 initiative, to be achieved through a network

of highly protected areas with no destructive or extractive activities. Full protection of 30% of the ocean is not sufficient, however – we must work together with communities and countries to achieve 100% sustainable use of our oceans, for the wellbeing of all.



WORKSHOP 3

The third workshop began with a keynote speech by Jens Frølich Holte, State Secretary of Norway's Ministry of Foreign Affairs. Panelists then shared experiences of their work to reconcile development of the Blue Economy with long-term sustainability and ocean health.

Nota : The World Bank defines the Blue Economy as the “sustainable use of ocean resources for economic growth, improved livelihoods and jobs while preserving the health of ocean ecosystems. Fields involved include tourism, transport, energy, fishing and aquaculture”.



KEYNOTE SPEECH

Mr JENS FRØLICH HOLTE

State Secretary, Ministry of Foreign Affairs, Norway

Norway State Secretary Holte began by noting that more than 1 billion people rely on seafood as their primary source of animal protein, and 30 million people derive their employment from ocean-based industries. Fish is one of the world's most traded foods; 90% of world trade uses sea routes, and most Small Island Developing States rely on coastal tourism for over 20% of their GDP.

Industries rely on the critical functions and ecosystem services oceans provide. Tourism can't survive on beaches littered with plastic and waters full of bleached coral reefs; no fleet can continue fishing if stocks collapse due to overfishing and climate change. Therefore we cannot afford not to reconcile the Blue Economy with sustainable ocean management, he said.

The Norway-initiated High-Level Panel for a Sustainable Ocean Economy brings together leaders of 14 countries to connect ocean health with ocean wealth. Research it commissioned shows climate-based ocean action could deliver up to one fifth of the emissions cuts needed to meet the Paris targets. Another report shows the ocean has the potential to produce far more seafood than it does today.

The costs of inaction are daunting: in 2012 the United Nations Development Programme (UNDP) estimated at \$200 billion per year the cumulative economic impact of poor ocean management. Action requires hard economic facts and good models for regulating competing interests.

Marine spatial planning or sector-based management are just two examples of integrated ocean management tools. All must consider multiple uses and pressures simultaneously, and reconcile them with the sustainability of societies and marine ecosystems. Transparency and inclusiveness are key to ensuring those affected have a say in management.

Norway has used knowledge-based ocean management plans for close to 20 years. Today, over 30% of its private-sector value creation and two-thirds of export value stem from ocean industries. On the international stage, it launched Oceans for Development to cooperate with partner countries on building a sustainable, inclusive ocean economy.

The connection between effective protection, sustainable production and equitable prosperity in the ocean sphere must be made central at all upcoming international conventions – the Our Ocean Conference, the UN Ocean Conference, the biodiversity conference, United Nations Framework Convention on Climate Change (UNFCCC) COP 26 and the UN Decade on Ocean Science, Mr Frølich Holte concluded.



PANEL DISCUSSION

How can Blue Economy and sustainable management of the Ocean in the fields of tourism, transport, energy, fishing and aquaculture, be reconciled?

MODERATOR

Ms Nina Jensen
Chief Executive Officer, REV Ocean

PANELISTS

Prof Carl Folke
Director, Beijer Institute and Stockholm Resilience Centre

Mr Wassim Daoud
Head, Corporate Social Responsibility and Sustainability, Ponant

Mr Hugo Tagholm
Chief Executive, Surfers Against Sewage & Edinburgh 2020 “Ocean Leader”

Ms Maren Hjorth Bauer
Co-founder Katapult Ocean

Mr Rupert Howes
Chief Executive Officer, Marine Stewardship Council

Moderator **Nina Jensen** opened the panel with a reminder: without the ocean, life on Earth would not exist. The ocean provides oxygen, food, inspiration, jobs, climate regulation and endless opportunities for economic development if we protect, restore and manage it well for the benefit of all.

The Stockholm Resilience Centre’s **Carl Folke** has some 300 publications to his name on the interplay among humans, the economy and ecology. He helped create the Seafood Business for Ocean Stewardship (SeaBOS) Initiative, an active partnership between scientists and global seafood companies working together to move the industry towards sustainability.

Inspired by the ecological concept of keystone species, Folke’s team identified “keystone actors” - the thirteen largest transnational fishing and aquaculture companies whose size and vertical integration give them disproportionate power over marine food webs worldwide. The idea was to find leverage points to shift current harmful practices towards sustainable ones: with a global population soon to reach 9 to 10 billion, we can’t do the same thing we’ve been doing since the Second World War, he said.

These thirteen companies sell 15% of the global catch and up to 40% of the most valuable species, represent 30% of salmon aquaculture, and dominate shrimp and feed production. This gives them huge influence over policy and practice, and thus, potentially, transformation.

Folke’s group of scientists initiated dialogue with ten of these keystone actors, holding 270 meetings since 2015. There has been a real change in mindsets, he notes. Companies see themselves less as producers and more as stewards seeking ways to achieve sustainability, and are moving from mere compliance to the conviction that healthy oceans are the precondition for good seafood production.

The SeaBOS Initiative has brought the sustainability concept to countries where it hadn’t existed. Companies from Japan, Thailand and South Korea are now actively working on sustainability reporting and other efforts.

The partnership is organized into task forces targeting the issues of Illegal, Unreported and Unregulated Fishing (IUU); forced labour; traceability; transparency; working with governments to improve regulations; ocean plastics; climate resilience; and microbial resistance and antibiotic use.

If SeaBOS succeeds with these 10 companies, it will hopefully create cascading effects throughout the whole seafood sector to shift to sustainable use. It is already partnering with other organizations and is being studied as a model that could be replicated to advance ocean stewardship in other areas of the Blue Economy, Folke concluded.

One such area is ocean tourism, represented in this workshop by **Wassim Daoud** of Ponant, the only French-owned cruise line, which specialises in luxury sea travel and sustainable tourism aboard smaller-scale ships.

Tourism has a key role to play in the Blue Economy: it is one of the world’s largest industries, contributing trillions of euros to the global economy and supporting the livelihoods of an estimated one in ten people worldwide, Daoud noted. Coastal and marine tourism represents a significant share, supporting more than 6 million jobs—second only to industrial fishing - and is projected to become the largest value-adding segment of the ocean economy, with a 25% share by 2030.

Blue Economy development can be reconciled with conservation and human rights to create a sustainable blue value chain, and now is the time to do it, Mr Daoud affirmed.

Ponant’s sustainability strategy models this, combining environmental protection with social and cultural preservation and economic development. Its itineraries are designed in consultation with local populations, taking into account impacts on nature as well as social, cultural and economic aspects.

Ponant is very attentive to protection of ecosystems especially in sensitive areas such as the Polar regions, adapting its itineraries depending on ice movements to preserve these areas. Its ships are limited to 200 passengers and use the cleanest available fuel and catalytic converters, while all water used onboard is treated and recycled, waste is sorted for recycling and treatment and 70% of fruits and vegetables served onboard are supplied locally.

The company also supports several conservation projects around the world, offsets 150% of its carbon emissions and collaborates with suppliers and startups to develop new green technologies.

The COVID-19 crisis offers a good opportunity to think about tourism’s future because we’re seeing a total change in customers’ mindsets - they now view sustainability as mandatory, Mr Daoud noted. While responding to new health concerns with modified sanitary measures, Ponant is giving more thought to its environmental impacts, designing new cruises in French waters to be closer to its customers without requiring extra travel.

The very positive feedback Ponant has received since the recent launch of these new cruises shows we have to be innovative, think differently and include sustainability in our conception of tourism, he concluded.

Hugo Tagholm of UK-based Surfers Against Sewage (SAS) agrees that tourism presents a key opportunity to build a sustainable Blue Economy. Sustainable ocean tourism can mobilise a worldwide community of ocean advocates for restoration and conservation of ocean ecosystems but also the diverse communities that surround them, because people protect what they love.

Tourists are marine indicator species themselves, acutely aware of ocean health and witness to damage, pollution and decline where it happens. SAS itself mobilizes over 100,000 ocean volunteers annually through beach cleanups and its Plastic Free Community network. Tourists and consumers will not just denounce harm but will also reward ocean-positive business and innovation.

A sustainable Blue Economy also depends on diverse coastal communities, which attract global audiences. Environmental justice is key, and must be applied to protect ocean communities from the degradation and inequity caused by current dominant economic forces.

Coastal people must be the defenders and primary beneficiaries of a recovering and flourishing ocean, and be highly involved in decision-making, monitoring and restoring its health. Creating local ocean councils could be one way to balance voices around the table and give local communities greater influence over planning decisions.

We also might reconsider our approach to planning and Environmental Impact Assessments, which currently license incremental damage of ecosystems, Tagholm suggests. Instead we should introduce local Environmental Recovery Assessments, which demonstrate the natural capital and social gains that any activity delivers locally and globally; no one wants to visit an ocean filled with heavy industry, choking on plastic or devoid of life.

Local ocean tourism can also offer marine restoration volunteering opportunities. By creating a new global ocean network, it can be the ultimate advertising campaign to win hearts and minds to highly protect 30% of our oceans by 2030 and restore blue carbon habitats worldwide, and we must invest in it.

The next panelist, **Maren Hjorth Bauer**, specialises in Sustainable Blue Economy investment. Her Oslo-based Katapult Ocean is a venture capital and private equity firm investing in impact-driven ocean tech startups. Its current portfolio includes 22 companies from 14 countries.

One is the UK's ARC Marine, which developed Reef Cubes to offset negative impacts caused by offshore construction by industries such as wind power, oil and gas and offshore aquaculture. These plastic-free building blocks protect offshore structures while creating reef ecosystems to serve as marine-life incubators.

Another is Remora Technologies of Costa Rica, providing traceability tools for small-scale artisanal fishers who can't afford larger certification schemes. These include tools to demonstrate fish was caught outside Marine Protected Areas, "smart scales", and scanners that identify allowable species and size. By enabling fishers to prove their fish was sustainably caught, these tools increase the value of their catch while encouraging best practices.

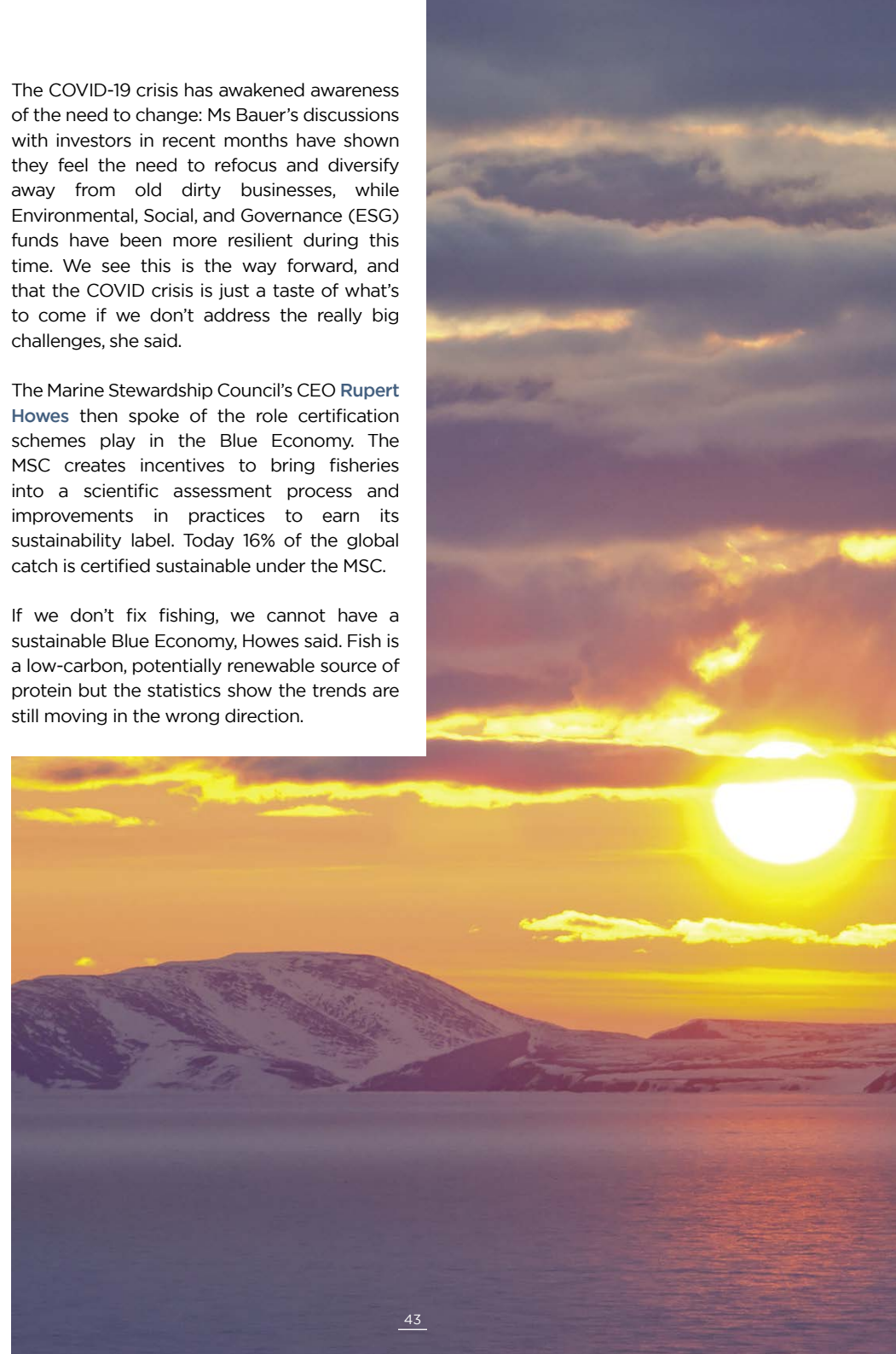
Closer to home in Norway, Brim Explorer offers wildlife and cultural excursions in the Arctic Sea on silent, hybrid-electric ships. It uses underwater drones and hydrophones to allow tourists to experience life below the surface without causing harm; the aim is to turn passengers into Arctic environmental advocates.


Maren Hjorth Bauer noted a definite increase in investor appetite for companies operating in the ocean space; according to a January, 2020 Credit Suisse poll of 350 investors, more than 90% expressed interest in the Blue Economy. Katapult is seeing more and more European investors and family offices adding blue to their fund strategy, as well as a generational shift, with younger investors more interested in new technology, impact and environmental investment.

The COVID-19 crisis has awakened awareness of the need to change: Ms Bauer's discussions with investors in recent months have shown they feel the need to refocus and diversify away from old dirty businesses, while Environmental, Social, and Governance (ESG) funds have been more resilient during this time. We see this is the way forward, and that the COVID crisis is just a taste of what's to come if we don't address the really big challenges, she said.

The Marine Stewardship Council's CEO **Rupert Howes** then spoke of the role certification schemes play in the Blue Economy. The MSC creates incentives to bring fisheries into a scientific assessment process and improvements in practices to earn its sustainability label. Today 16% of the global catch is certified sustainable under the MSC.

If we don't fix fishing, we cannot have a sustainable Blue Economy, Howes said. Fish is a low-carbon, potentially renewable source of protein but the statistics show the trends are still moving in the wrong direction.





Approximately 34% of stocks are now being fished at unsustainable levels - a threefold increase since 1970. With the global population set to grow from 7 billion to 10 billion, we must manage what we've got sustainably. This is a matter not just of food security but also economic health: some 5 million fishing vessels employ 50 million people directly and ten times that indirectly.

The MSC has led 400 fisheries into independent scientific assessments of each fishery's stock health, environmental impacts and management quality. Fisheries that meet the standard with full traceability can use the MSC label. This empowers consumers to make informed choices, rewards sustainable fisheries and creates the incentive for others to step up.

One example is South African hake. Assessment of a controversial fishery revealed it was overfishing one of two hake stocks and killing 10,000 seabirds each year. Using MSC as a tool, it worked with WWF South Africa, improved relations with the regulator and built relations with the commercial sector. Its stocks are now managed sustainably, and seabird bycatch has been reduced by 90%. The fishery also won new markets, helping to protect 12,000 much-needed, mainly female processing jobs on land.

While the last 20 years have shown MSC works, it can't work on its own - governments need to create an enabling environment. The SEABOS initiative is a positive example, where leading companies have committed to work with governments to help create the necessary policy reforms. The world is at a crossroads: COVID-19 isn't going to disappear anytime soon, but it has created a useful sense of urgency and the chance for a great reset; this is a once-in-a-century opportunity, Mr Howes said.

Carl Folke noted that climate change adds further urgency, as it challenges the stability of the entire planet. It's not just a matter of tweaking a bit at the margins of how the economy works now; it's about shifting to the concept of stewardship of ecosystems. Tourism, for example, can be an incentive for local communities to be good stewards and to earn dignity and respect for taking care of their ecosystems instead of just being links in a production efficiency chain.

Humans are the dominant force on the planet now, creating completely new environments for all organisms. This requires mobilising information technology to monitor and understand these changes so that we can act on them.

We're starting to see a shift, Mr Folke asserted: even truck companies like Sweden's Scania are changing their whole approach from linear supply chains to what they call their own ecosystems, building more dynamic connections and capacity to live with changing circumstances. Initiatives like SeaBOS can assist in this transformation.

Noting that the panel had touched on finance, science, market-based solutions and the role of local communities, but little on government and policy-making, Moderator Nina Jensen asked panelists for their recommendations for decision-makers to boost development of a sustainable Blue Economy.

Hugo Tagholm urged mobilising public opinion behind conservation initiatives, as decision-makers are always influenced by their constituents. He mentioned a review led by former UK Environment and Fisheries Minister Richard Benyon which recommends stronger protection in parts of the UK's Marine Protected Area network, as current mixed-use areas are failing to provide sufficient protection and full recovery of the marine environment.

This is the kind of radical thinking we need; if we get the public behind these initiatives then we can highly protect large swathes of the ocean, enabling the sustainable Blue Economy elsewhere through spillover effects, Tagholm said. The COVID-19 crisis has shown we can pivot on a dime and that big business and government can make decisions very quickly - that's the speed we need for ocean recovery.

Regarding MPAs and tourism, Wassim Daoud said Ponant has noted a lack of regulations in polar and island regions, and suggested responsible businesses could play a role by working with local authorities to implement rules.

In the Indian Ocean, Ponant proposed that local authorities perform an environmental impact assessment before the company designed its new cruise itineraries, to ensure they would not harm the local ecosystem and biodiversity. The World Bank and the European Bank have a model for environmental impact assessments for land-based but not for sea tourism - this should be developed, Mr Daoud said.

The panel was then opened to questions from attendees. **Michèle Barbier**, scientist and founder of the Institute for Science and Ethics, asked about the concept of Engaged Tourism.

Mr Daoud responded that Ponant invites many scientists onboard its ships to conduct research and asks them to share it with passengers and encourage participation. Experiments have included an Antarctic wave study whose results were presented daily, or a submarine sonic measurement that allowed passengers to listen to the sea.

These interactions have become so popular the company created the Ponant foundation in 2019 to foster them. The cruise line also partners with conservation actors working in big forests around the world to allow passengers to participate in reforestation and witness its progress, he said.

Hugo Tagholm's SAS organises massive beach clean-ups to tackle plastic waste. He noted the rapid development of projects involving tourists in ecosystem restoration in the ocean sphere, such as SeaTrees, where tourists and communities replant and restore mangroves, kelp beds, coral reefs and seagrass meadows to foster carbon sequestration and habitats for spawning and nurseries.

Conservation International's Pablo Obregon then asked panelists for recommendations as to how to address environmental sustainability while addressing social responsibility and how to prioritise, especially in cases of limited funding, information and political and enterprise will.

Regarding funding, spending on COVID-19 shows that when we need it, the financial resources are there, said MSC's Rupert Howes. That money must be spent wisely because we're borrowing from our children, and probably their children, given current levels of debt. All investment should be guided by sustainability principles; decarbonisation is a priority, because if we don't fix carbon we don't fix oceans, and vice versa.



This takes political leadership, commitment and partnerships. Sustainable Development Goals and Agenda 2030 are the road map, with 193 nations signed up; now it's time to deliver. For twenty years now, the WTO has been discussing eliminating harmful subsidies to fishing.

Market and consumer power has led tuna fisheries to double their engagement in the MSC program, Mr Howes noted, as has involvement in science-business partnership SeaBOS. Korea's Dongwon Industries, one of SeaBOS's «keystone actors», has entered all its tuna fisheries into a third-party assessment and some are now beginning to achieve certification.

Social issues in fisheries such as slave and bonded labour and killings of observers must also be addressed. This can be tackled through the supply chain and proper enforcement of monitoring, control and surveillance requirements at the Regional Fisheries Management Organization level, he said.

Marine ecologist Marea Hatzioles suggested developing a sustainable Blue Economy Index to help guide investors towards socially and environmentally sustainable Blue business; a similar concept already exists in the form of Green Growth portfolios.

Katapult's Maren Bauer supported this, while noting it requires agreeing on how to measure activities' impact on the marine environment. All the companies in Katapult's portfolio report on financials but also on impact; it's necessary to define common ways of doing that.

Filip Claeys, Belgian chef and Founder of NorthSeaChefs asked about the role of restaurants and chefs in ocean protection.

Carl Folke's institute is developing an initiative called gastronomic landscapes with Swedish chefs, using their growing knowledge about new ingredients and species and how to use them sustainably but this is mostly terrestrial, Mr Folke said. It could easily be applied to coastal areas in an integrated approach to support stewardship of whole ecosystems that produce food.

Rupert Howes noted chefs have a pivotal role and a moral and ethical duty in educating customers and connecting them to the sea by demanding sustainable seafood. This also applies to individual consumers: buying sustainable fish sends signals back down the supply chain to pressure actors to operate sustainably, and rewards those fishers doing the right thing.

François Houllier of Institut français de recherche pour l'exploitation de la mer (IFREMER) asked about the kinds of new scientific knowledge, data, and expertise needed to reconcile Blue Economy activities with sustainability.

Nina Jensen suggested much of the abundant data available isn't being put to good use, so first it is necessary to ensure the science we already have is being used by and made more readily available to decision makers, and to those acting in ways that run counter to good science. Efforts to increase ocean knowledge must also be stepped up, particularly with regard to human impact and that of climate change and ocean acidification over the long term. This will be critical to determining how to manage fisheries in the future.

Rupert Howes warned of the risk of governments using the lack of data to delay action on climate change. He referred to a recent Intergovernmental Panel on Climate Change (IPCC) report on oceans and the cryosphere stating that a 1.5-degree warming will destroy 90% of the oceans' coral reefs. A 2-degree rise would wipe them out altogether, with profound implications for food security and local livelihoods. As the warming trend is towards 3 degrees and beyond, decisions must be made now based on the considerable existing science.

Carl Folke agreed, and called for science and business to collaboratively find solutions, as the world will be much more of a moving target than what we've been spoiled with during our lifetimes. This requires much greater adaptability in the face of changing conditions, especially climate change and ocean acidification.

Nina Jensen suggested replicating successful initiatives like SEABOS for other industries, and that existing knowledge be translated into concrete solutions - often decision-makers and

business leaders don't know how to act on the science. We need to be much clearer and work with tech startups, industry and funders to make sure these solutions are developed. As COVID-19 has shown, the money is there and investing in ocean sustainability is critical, she said.

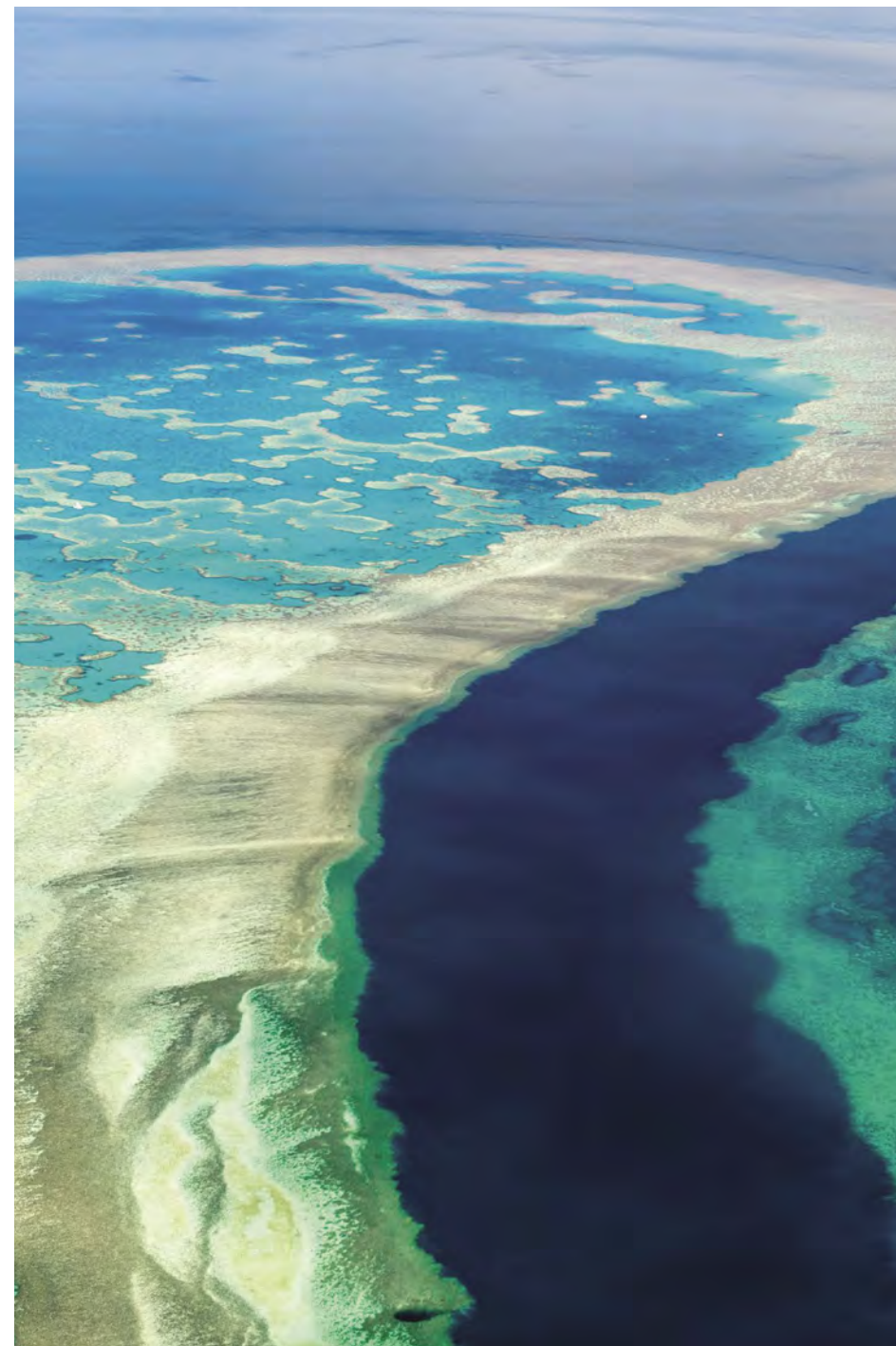
Andrei Polejack of Brazil asked about the issue of intellectual property and the transfer of marine technology in light of the Global South's lack of technological and human capacity.

This is very complex and especially important in relation to inequality, which was escalating even before the COVID crisis, Carl Folke said. It boils down to governance systems and the lack thereof. There have been a lot of attempts to enhance that capacity; ideally, there would be some type of transparent new forum or international organization that would guarantee more equitable sharing. Existing tools are not sufficient and it is very important to highlight this challenge.

Maren Bauer's Katapult has looked at over 1,500 impact-driven ocean startups from over 80 countries around the world. She noted the rapid rise of promising tech startups and a very high level of engagement and creativity in the developing world, where people may feel these issues more viscerally and have a different, stronger motivation to build solutions.

In conclusion, Nina Jensen noted the panel's many concrete examples of the potential for reconciling Blue Economic activity with ocean health and that of local communities, from the SeaBOS initiative to sustainable and engaged tourism, ocean tech investment, and seafood certification.

The ingredients moving us forward are speed, scale, science and stewardship, she said. Most importantly the ocean needs major investments to meet the challenges we're facing and the money is available if we just decide this is important enough, which it definitely is.



Mr OLIVIER WENDEN

Vice-President and Chief Executive Officer, Prince Albert II of Monaco Foundation

Mr ROBERT CALCAGNO

Chief Executive Officer, Oceanographic Institute, Prince Albert I of Monaco Foundation



Dear friends of the Monaco Blue Initiative,

We are very pleased that this digital edition of the Monaco Blue Initiative could take place despite the current context, during which all our habits have been turned upside down. It was indeed a strong wish expressed by His Serene Highness Prince Albert II of Monaco, His Foundation and the Oceanographic Institute to ensure that this sound platform for dialogue and exchange could continue despite the pandemic. The MBI was launched 10 years ago and it was important to continue this initiative, especially as this year was meant to be a decisive year for the ocean and for biodiversity.

We believe that this first-ever digital MBI was a success - and that is thanks to our distinguished speakers, moderators, panelists and the MBI secretariat. Thank you all greatly for the remarkable contribution.

Thank you also to all the attendees who connected over the last month, you were close to 200 participants in this online MBI.

A considerable number of topics were discussed during these online sessions and important recommendations emerged which we hope will be taken into account in the high-level Ocean gatherings to take place in the coming months and the coming year.

From the position of Marine Protected Areas in international negotiations to the importance of community involvement in MPA management and the sustainable Blue Economy, we have had three sessions full of inspiring messages, engagements, and concrete examples and ideas to stand up to the vast challenges which lie ahead of us in this reset world.

Through the conversations that we had; we can highlight some salient points:

Firstly, that the Covid-19 crisis is intimately linked to the degradation of the environment, itself connected to anthropogenic activities. However, in many countries, due to the worrying sanitary, economic and social and financial context, environmental protection will most likely not be a priority in many parts of the world. It is crucial to make sure that Marine Protected Areas and other integrative conservation measures are placed at the center of international discussions.

Secondly, and as highlighted by His Serene Highness and by many keynote speakers and panelists our collective goal should be the protection of at least 30% of land and Ocean by 2030 with a substantial part under strict protection. Third, nonetheless and ultimately, we will need 100% sustainable use of the oceans.

Another interesting point that was raised is science to education and science to the decision-making process, which should be deepened and strengthened.

Lastly, the pandemic has proven that we can no longer work in silos and that we need immediate collective action. The pandemic is also calling for the implementation and leveraging positive solutions that already exist as part of Green or Blue economies, such as ecotourism and sustainable fisheries.

Today's final session on the Blue Economy showed concrete examples of the commitment of economic actors to ocean protection, and of how to make economic activities go hand in hand with conservation. We welcome the efforts of the private sector to create this ocean-friendly strategy.

We would like to convey a clear message of engagement: we will be there, the Principality of Monaco will be there, to support such positive initiatives, and to help ensure that your efforts are known to the decision makers and the general public.

It is in this spirit, and thus on the topic of the Blue Economy, that the 12th edition of the Monaco Blue Initiative will be held on 21st and 22nd March 2021. We count on you all to help us identify champions of the sustainable Blue Economy who will be able to testify to their commitment and their success stories, but also difficulties and lessons learned. Thank you in advance for your suggestions!

There is still a long way to go to make the Blue Economy truly sustainable. We need to confess that.

The ability of different actors to put their ideas on the table, recognizing different points of view and finding compromises, will be critical.

For such exchanges, the knowhow developed by “Sustainability science”, a concept cofounded 30 years ago, will be essential. With that, I refer back to today’s discussion and how it is necessary that scientists, entrepreneurs, and decision makers, amongst others, are able to progress, work transboundary and transdisciplinary, and to consolidate a robust scientific analysis and advice which will be palatable to entrepreneurs and policy makers. We have plenty of data, but we need to integrate this new level of understanding. Referring back to today’s discussion, speed, scale, science and stewardship are four pillars we need to remember.

We therefore call for these discussions to ramp up in the weeks and months to come, and we count on the commitment of all our partners. You are all aware of the very busy Ocean agenda ahead.

Dear friends, despite the difficult context of this pandemic, we have noticed during these workshops, that your efforts and commitment remain intact and even strengthened. On behalf of His Serene Highness, His Foundation and the Oceanographic Institute, Prince Albert I of Monaco Foundation, we would like to extend a sincere thank you for your tireless work to protect our ocean!

We do hope to meet you again in Monaco for the next edition of the MBI in March 2021.



ACRONYMS

BBNJ: Marine Biodiversity of Areas Beyond National Jurisdiction
CBD COP15: 15th meeting of the Conference of the Parties to the Convention on Biological Diversity
CCAMLR: The Commission for the Conservation of Antarctic Marine Living Resources
CPAWS: The Canadian Parks and Wilderness Society
EEZ: Exclusive Economic Zone
IFREMER: Institut français de recherche pour l'exploitation de la mer
IMO: The International Maritime Organization
IMPAC5: 5th International Marine Protected Areas Congress
IPCC: Intergovernmental Panel on Climate Change
IUCN: International Union for the Conservation of Nature
IUU: Illegal, Unreported, Unregulated fishing
LMMA: Locally Managed Marine Area
MBI: Monaco Blue Initiative
MOW: Monaco Ocean Week
MPA: Marine Protected Area
OPRI: The Sasakawa Peace Foundation's Ocean Policy Research Institute
OSPAR: OSPAR Commission
SAS: Surfers Against Sewage
SDG: Sustainable Development Goals
SEABOS: Seafood Business for Ocean Stewardship
UN: United Nations
UNCLOS: United Nations Convention on the Law of the Sea
UNDP: United Nations Development Programme
UNFCCC: United Nations Framework Convention on Climate Change

PARTICIPANTS

Participants (at least one of the three sessions)

Ms. **Amandine AFOTA**, Senior Policy Advisor, Banque de France, France
Dr. **Grethel AGUILAR**, Acting Director General, International Union for Conservation of Nature, Switzerland
Mr. **Philippe AHIER**, Chargé de mission, Comité Régional des Pêches Maritimes et des Elevages Marins de Provence-Alpes-Côte d'Azur, France
Dr. **Carlos ANDRADE**, Head of Marine Aquaculture Division, Observatorio Oceanica da Madeira, Portugal, Madeira
Ms. **Giuditta ANDREAUS**, Manager, Strategic Partnerships, International Union for Conservation of Nature, Switzerland
Mr. **Sumeet ANAND**, President, Indo-French Chamber of Commerce & Industry (IFCCI)/ CCI France-Inde, India
Mr. **Joseph APPIOT**, Coordinator for Marine, Coastal and Island Biodiversity, Secretariat of the Convention on Biological Diversity, Canada
Ms. **Yolanda ARJONA**, Senior MPA Management Advisor, Joint Nature Conservation Committee, Scotland
Ms. **Lena AVELLAN**, Acting Director, OSPAR Agreement, United Kingdom
Mr. **Pål BAKKEN**, Founder, Seaweed Energy Solutions - AS & SeaForester, Portugal
H.E. Amb. **David BALTON**, Senior Fellow, Polar Institute Wilson Center, United Kingdom
Dr. **Michèle BARBIER**, Executive Director / Scientific officer, Institute for Science & Ethics / The Mediterranean Science Commission, Principality of Monaco
Ms. **Amy BARRETT**, Conference writer, France
Prof. **John BAXTER**, Honorary Professor, Saint Andrews University, Scotland
Mr. **Maximiliano BELLO**, Executive advisor to board of Missions and Latin American manager of island Conservation, Mission Blue, U.S.A.
Mr. **Jean-Pascal BERGE**, CEO, BIOTHOT - For a circular blue world: efficient (bio) technology solutions, France
Ms. **Dona BERTARELLI**, Co-Chair, The Bertarelli Foundation, Switzerland
Mr. **Gilles BESSERO**, Director, Monaco Explorations, Principality of Monaco
Dr. **Sandra BESSUDO**, President and Founder, Fundación Malpelo y Otros Ecosistemas Marinos, Colombia
Ms. **Shirley BINDER**, National Director of Environmental Policy, Ministry of Environment, Panama
Mr. **Arnaud BOETSCH**, Director, Communication & Image, Switzerland
Ms. **Caterina BOITANI**, Project Manager, Rolex Awards for Enterprise, Switzerland
Ms. **Marie BORCHERS**, Director Brussels Office, Jacques Delors Institute, Belgium
Ms. **Gisele BRISSON**, Founder, Ocean Elders, U.S.A.
Ms. **Liz BURDOCK**, President & CEO, Business Network for Offshore Wind, U.S.A.
Mr. **Robert CALCAGNO**, Chief Executive Officer, Oceanographic Institute, Prince Albert I of Monaco Foundation, Principality of Monaco
Mr. **Nelson CAMPOS PEREIRA**, International Affairs Advisor, Ministry Science, Technology, Knowledge and Innovation, Chile
Dr. **Puri CANALS**, President, Mediterranean Protected Areas Network, France
Ms. **Leticia CARVALHO**, Head of the Marine and Freshwater Branch, United Nations Environment Programme, Kenya

Mr. **Bertrand CHARRON**, Science and Sustainability Communications Manager, Aquaculture Stewardship Council, The Netherlands

Mr. **Guillaume CHIRON**, Deputy Head of Division Agriculture, Rural Development, Biodiversity, Agence Française de Développement, France

Prof. **Thierry CHOPIN**, Professor of Marine Biology - Honorary Consul of France, Canadian Integrated Multi-Trophic Aquaculture Network, University of New Brunswick, Canada

Mr. **Filip CLAEYS**, Founder, NorthSeaChefs, Belgium

Dr. **Joachim CLAUDET**, Research Director, The French National Centre for Scientific Research (CNRS), France

Mr. **Samuel COLLINS**, Project Manager – Blue Network, Oceano Azul Foundation & Oceanario de Lisboa, Portugal

Mr. **Martin COLOGNOLI**, Co-founder - Scientific Director, Coral Guardian - Empowering Coastal Communities, Indonesia - France

Dr. **Rita COLWELL**, Distinguished University Professor, University of Maryland Institute for Advanced Computer Studies, U.S.A.

Mr. **Charles COOPER**, Managing Director, Government Affairs, Vulcan Inc., U.S.A.

Ms. **Corinne COPIN**, Project Officer, Ocean Policy, Oceanographic Institute, Prince Albert I of Monaco Foundation, France

Mr. **Andrés COUVE CORREA**, Minister Science, Technology, Knowledge and Innovation, Government of Chile

Ms. **Eglantine CUJO**, Member of Cabinet - Commissioner Sinkevičius for Environment, Oceans and Fisheries, European Commission, Belgium

Mr. **Philippe CURY**, Research Director, French National Institute for Development – IRD, Belgium

Mr. **Wassim DAOUD**, Head Corporate Social Responsibility and sustainability, Ponant, France

Ms. **Maria DAMANAKI**, Global Managing Director for Oceans, The Nature Conservancy, United Kingdom

Mr. **Francesco DEFRANCO**, Head of Economic Planning and project finance Unit - Environmental and Technical Services and IT Unit, Consorzio di Gestione di Torre Guaceto - Area Marina Protetta - Riserva Naturale dello Stato, Italy

Mr. **Thomas DE WILLIENCOURT**, Director, Pure Ocean Fund, France

Mr. **Giuseppe DI CARLO**, Director, WWF Mediterranean Marine Initiative, Italy

Ms. **Sanne DIJKSTRA-DOWNIE**, Development Manager and Ocean Leaders Partnerships Director, School of Geosciences, The University of Edinburgh, Scotland

Mr. **Olivier DUFOURNEAUD**, Director Ocean Policy, Oceanographic Institute, Prince Albert I of Monaco Foundation, Principality of Monaco

Mr. **Samuel DUPONT**, CEO, Co-founder, BIOCEANOR SAS, France

Dr. **Sylvia EARLE**, Founder, Mission Blue, U.S.A.

Mr. **Christos ECONOMOU**, Acting Director, Directorate Maritime Policy and Blue Economy in DG MARE, European Commission, Belgium

Ms. **Minna EPPS**, Director, Global Marine and Polar Programme, International Union for Conservation of Nature, Switzerland

Prof. **Segen ESTEFEN**, General Director, National Institute for Ocean Research, Brazil

Mr. **Gaëtan FABRITIUS**, Director - Innovation & Prospective, Collecte Localisation Satellite, France

H.E. **Mr Bernard FAUTRIER**, Minister plenipotentiary, Special advisor of HSH the Sovereign Prince of Monaco for environment, Principality of Monaco

Ms. **Ragna FIDJESTØL**, Councillor, Norwegian Embassy in France, Norway

Mr. **José María FIGUERES OLSEN**, Former President of Costa Rica, Co-founder and Board Chair of Ocean Unite, United Kingdom

Prof. **Carl FOLKE**, Director, Beijer Institute and Stockholm Resilience Centre, Sweden

Ms. **Kerstin FORSBERG**, Director, Planeta Océano, Peru

Mr. **Svein FOSSÅ**, Vice President, Ornamental Fish International, Norway

Ms. **Beate GABRIELSEN**, Senior Adviser, Norwegian Ministry of Foreign Affairs, Norway

Dr. **Cecile GASPARD**, Founder and Executive Director, Te Mana o Te Moana, French Polynesia

Ms. **Jacqueline GAUTIER-DEBERNARDI**, Director, Association Monégasque pour la Protection de la Nature, Principality of Monaco

Mr. **Pierre GILLES**, Project officer and Co-Secretary of the Monaco Blue Initiative, Ocean Policy, Oceanographic Institute, Prince Albert I of Monaco Foundation, Principality of Monaco

Ms. **Silvia Patricia GONZALEZ-DIAZ**, Director, Centro de Investigaciones Marinas, Cuba

Ms. **Charlotte GOUGH**, Head of Monitoring Evaluation and Learning, member of the Global Leadership Team, Blue Ventures, Republic of Madagascar

Ms. **Sylvie GOULARD**, Sous-Gouverneure, Banque de France, France

Dr. **Rachel GRAHAM**, Executive Director, MarAlliance, Belize

Ms. **Lina HANSSON**, Project Officer, Co-Secretary of the Monaco Blue Initiative, Prince Albert II of Monaco Foundation, Principality of Monaco

Dr. **Harriet HARDEN-DAVIES**, Nereus Postdoctoral Fellow, University of Wollongong, Australia

Dr. **Alasdair HARRIS**, Founder and Executive Director, Blue Ventures, United Kingdom

Ms. **Marea HATZIOLOS**, Advisor, Ocean Leaders Program, U.S.A.

Mr. **Oliver HILLEL**, Programme Officer, Secretariat of the Convention on Biological Diversity, Canada

Dr. **Nathalie HILMI**, Chargée de recherche en Economie Environnementale, Scientific Center of Monaco, Principality of Monaco

Ms. **Maren HJORTH BAUER**, Co-founder Katapult Ocean, Advocate for ocean impact startups, Norway

Mr. **Ove HOKSTAD**, Senior Adviser, Norwegian Ministry of Trade, Industry and Fisheries, Norway

Mr. **Michael HOLLAND**, Advisor, Woods Hole Oceanographic Institution, U.S.A.

Mr. **Jens Frølich HOLTE**, Ministry of Foreign Affairs, State Secretary, Norway

Mr. **François HOULLIER**, President & Chief Executive Officer, IFREMER, France

Mr. **Rupert HOWES**, Chief Executive Officer, Marine Stewardship Council, United Kingdom

HIS SERENE HIGHNESS PRINCE ALBERT II OF MONACO

Ms. **Minako IUE**, President, Sailors of the Sea, Japan

Ms. **Nina JENSEN**, Chief Executive Officer, REV Ocean, Norway

Ms. **Sabine JESSEN**, Executive Director, IMPAC5 Secretariat, Fisheries and Oceans Canada, Canada

Mr. **Harry JONAS**, Co-chair, IUCN WCPA Task Force on Other Effective Area-Based Conservation Measures, UK-Malaysia

Ms. **Peggy KALAS**, Director, High Seas Alliance, U.S.A.

Prof. **Divya KARNAD**, Assistant Professor of Environmental Studies, Ashoka University & Founder “InseasonFish», Republic of India

Prof. **Heather KOLDEWEY**, Honorary Professor, National Geographic Fellow, Programme Lead, Bertarelli Programme in Marine Science, University of Exeter Penryn Campus, United Kingdom

Mr. **Masanori KOBAYASHI**, Senior researcher, Ocean Policy Research Institute, The Sasakawa Peace Foundation, Japan

Ms. **Nina KUŠAR**, Project Specialist, World Tourism Organization (UNWTO), Spain

Ms. **Else KVEINEN**, Senior Adviser, Section for Oceans and Private Sector Development, Norway’s Ministry of Foreign Affairs Norway

Prof. **Dan LAFFOLEY**, Marine Vice Chair, World Commission on Protected Areas of International Union for Conservation of Nature, Switzerland

Mr. **Pierre LAHOCHÉ**, Advisor to the CEO, Oceanographic Institute, Prince Albert I of Monaco Foundation, France

Mr. **Marco LAMBERTINI**, Director General, WWF International, Switzerland

Ms. **Alessandra LAMOTTE**, International Officer, Ocean Governance, Law of the Sea, Arctic Policy, Directorate-General Maritime Policy and Fisheries, European Commission, Belgium

Mr. **Edouard LE BART**, Regional Director South Europe, Africa, Middle East & South Asia, Marine Stewardship Council, United Kingdom

Mr. **Gilles LÉCAILLON**, Founder & President, Ecocean - Marine Ecological Engineering, France

H.E. Mr **Didier LENOIR**, Ambassador of the European Union to the Principality of Monaco, Delegation of the European Union to OECD/UNESCO, Principality of Monaco

Mr. **Pierre LEONARD**, Marketing and communication assistant, ACRI-ST - Remote Sensing, Earth Observation by satellite, Environment monitoring, Data quality control, France

Mr. **Miguel MARQUES**, Partner Leader, The PricewaterhouseCoopers Blue Economy Global Centre of Excellence, Portugal

Ms. **Phénia MARRAS-AIT RAZOUK**, Marine Adviser, Project Engineering for International Cooperation - Directorate for European and International Relations, The French Biodiversity Agency, France

Ms. **Elizabeth MARUMA MREMA**, Executive Secretary, Science, Society and Sustainable Futures Division, Convention on Biological Diversity, Canada

Mr. **Roderic MAST**, President and CEO, The Oceanic Society, U.S.A.

Mr. **Gordon McGREGOR**, Director, Council Member, Nomad Energy Solutions, UK Natural Environmental Research Council, Scotland

H.E. Mr **Patrick MEDECIN**, Ambassador to India, Government of the Principality of Monaco

Mr. **Frédéric MENARD**, Director of the Department OCEANS, The French National Research Institute for Sustainable Development, France

Ms. **Raquel MENDES**, Representative of H.E. Mr Peter Thomson, UNSG's Special Envoy for the Ocean, Executive Assistant to the UNSG's Special Envoy for the Ocean, France

Mr. **Ricardo MENESES-ORELLANZA**, Secretario Técnico, Corredor Marino del Pacífico Este Tropical, CMAR, Costa Rica

Mr. **Adam MILLER**, Co-Founder and Executive Director, Planet Indonesia, Republic of Indonesia

Ms. **Janaina MITSUE KIMPARA**, Researcher – Mariculture, Brazilian Agricultural Corporation (EMBRAPA), Brazil

Dr. **Philippe MONDIELLI**, Scientific Director, Prince Albert II of Monaco Foundation, Principality of Monaco

Mr. **Rory MOORE**, Head of International Projects, Blue Marine Foundation, United Kingdom

Prof. **Patrícia MORAES-VALENTI**, Researcher, Aquaculture Center of São Paulo State University, Brazil

Dr. **Lance MORGAN**, President, Marine Conservation Institute, Global Ocean Refuge System, U.S.A.

Ms. **Sandra MORSON**, Executive Leadership Coach, Ocean Leaders Core Team, Scotland

Ms. **Wanja Dorothy NYINGY**, IISD Reporting Services, International Institute for Sustainable Development, Kenya

Mr. **Pablo OBREGON**, Senior Program Manager, Fisheries, Conservation International, Colombia

Mr. **Eduardo ONO**, Owner – President, Nova Aqua (Blue Economy / aquaculture) & National Aquaculture Commission at Brazilian Confederation of Agriculture and Livestock, Brazil

Mr. **David OSBORN**, Deputy Director, Ecosystems Division, United Nations Environment Programme, Kenya

Dr. **Nadia OUNAIS**, Vice-President, International Affairs, Oceanographic Institute, Prince Albert I of Monaco Foundation, Principality of Monaco

Mr. **Dominic PATTINSON**, Executive Secretary, OSPAR Agreement, United Kingdom

Ms. **Aurlane PERTUISOT**, Project Officer, Co-Secretary of the Monaco Blue Initiative, Prince Albert II of Monaco Foundation, Principality of Monaco

Ms. **Chloé PHAN VAN PHI**, Director of Sustainable Agricultural Sector, Innovafeed, France

Dr **Tiago PITTA E CUNHA**, Chief Executive Officer, Oceano Azul Foundation & Oceanario de Lisboa, Portugal

Ms. **Brune POIRSON**, Secretary of State to the Minister for the Ecological and Inclusive Transition, French Government, France

Mr. **Andrei POLEJACK**, Ex - General Coordinator for Oceans, Antarctica and Geosciences, Brazilian Ministry of Science, Technology, Innovation and Communications, Brazil

Mr. **Francesco RAELI**, Head of the Rolex Awards for Enterprise, Communication & Image , Rolex S.A., Switzerland

Ms. **Cécile RAFAT**, Lawyer - shipping and environmental policies, Armateurs de France, France

Mr. **Matt RAND**, Director, Pew Bertarelli Ocean Legacy, U.S.A.

Mr. **Olivier RAYBAUD**, Founding Partner & Managing Partner, Blue Ocean Partners, France

Mr. **Romain RENOUX**, Executive Director, The MedFund, Principality of Monaco

Ms. **Patrícia RICARD**, President, Oceanographic Institute Paul Ricard, France

Mr. **Marc RICHIR**, International Officer, Ocean Governance, Law of the Sea, Arctic Policy, Directorate-General Maritime Policy and Fisheries, European Commission, Belgium

Ms. **Haydée RODRIGUEZ ROMERO**, Vice-Minister Water and Seas, Government of Costa Rica, Costa Rica

Ms. **Marie ROMANI**, Executive Secretary, MedPAN, France

Mr. **Rodrigo ROUBACH**, Senior Aquaculture Officer (Aquatic Animal Nutrition), Fisheries & Aquaculture Policy & Resources Division – UN Food & Agriculture Organization, Italy

Dr. **Vladimir RYABININ**, Executive Secretary, Assistant Director General, Intergovernmental Oceanographic Commission of UNESCO, France

Ms. **Karen SACK**, Managing Director, OceanUnite, U.S.A.

Dr. **Enric SALA**, Explorer in Residence, National Geographic, U.S.A.

Ms. **Susana SALVADOR**, Executive Secretary, ACCOBAMS Agreement, Principality of Monaco

Ms. **Yolanda SANCHEZ**, Manager of Education programs, Oceana Chile, Chile

H.E. Mr **Serge SEGURA**, Ambassador of France for the Oceans, Ministry for Europe and Foreign Affairs, France

Ms. **Shally SHANKER**, Founder & Managing Partner, The AiiM Partners Fund - Investing in a better future, U.S.A.

Dr. **Alexander SHESTAKOV**, Director, Science, Society and Sustainable Futures Division, Convention on Biological Diversity, Canada

Mr. **François SIMARD**, Ex Director a.i, Global Marine and Polar Programme, IUCN, Switzerland

Mr. **Virginijus SINKEVICIUS**, Commissioner for Environment, Oceans and Fisheries, European Commission, Belgium

Mr. **Hemant SONDHI**, Marine Manager/Quality Assurance (Safety, Quality, Marine, Operation) for the fleet, Scorpio Ship Management S.A.M, Principality of Monaco

Mr. **Mark J. SPALDING**, President, The Ocean Foundation, U.S.A.

Mr. **Francis STAUB**, Secretariat, International Coral Reef Initiative, France

Mr. **Jordan STRIK**, Global Sustainability Manager, SBM Offshore, The Netherlands

Dr. **Atsushi SUNAMI**, President, Ocean Policy Research Institute of Sasakawa Peace Foundation, Japan

Mr. **David SUSSMAN**, President, Seafoodia, Canada

Mr. **Hugo TAGHOLM**, Chief Executive, Surfers against Sewage, United Kingdom

Mr. **Frédéric TARDIEU**, Chief Executive Officer, Sulubaaï Foundation, France

Ms. **Florence TERCIER**, Head of Philanthropy, Ledunfly, Switzerland

Prof. **Fabiano THOMPSON**, Coordinator, Brazilian Marine Biotechnology Network, Brazil

H.E. Amb **Peter THOMSON**, UNSG's Special Envoy for the Ocean, United Nations, Fiji

Dr. **Sebastian TROENG**, Executive Vice President of Field Delivery, Conservation International, U.S.A.

Prof. **Alexander TUDHOPE**, Founder and Co-Director, Edinburgh Ocean Leaders Programme, Scotland

Mr. **Jonathan TURNER**, Director, NLA International Ltd, United Kingdom

Prof. **Wagner VALENTI**, Director, UNESP Innovation Agency – AUIN Sao Paulo State University, Brazil, Brazil

Mr. **Ramon VAN BARNEVELD**, Deputy Head of Unit, European Commission, DG Maritime Affairs and Fisheries, Ocean Governance, Law of the Sea, Arctic Policy, Belgium

Mr. **Rudi VAN BEYLEN**, Founder & Chef, NorthSeaChefs, Belgium

Dr. **Annapurna VANCHESWARAN**, Senior Director, Communications Outreach and Advocacy Unit, The Energy and Resources Institute, Republic of India

Dr. **Christophe VASSEUR**, CEO, Inalve, France

Mr. **José VILLALON**, Corporate Sustainability Director, NUTRECO, The Netherlands


Dr. **Atsushi WATANABE**, Senior researcher, Ocean Policy Research Institute, The Sasakawa Peace Foundation, Japan

Mr. **Olivier WENDEN**, Vice-President and Chief Executive Officer, Prince Albert II of Monaco Foundation, Principality of Monaco

Dr. **Meriwether WILSON**, Founder and Co-Director, Edinburgh Ocean Leaders Programme, Scotland

Ms. **Esther WOLFS**, Partner and founder, Wolfs Company, The Netherlands

ACKNOWLEDGMENTS



THE MONACO BLUE INITIATIVE WISHES TO DEEPLY THANK ALL THE PARTICIPANTS, PARTICULARLY THE KEYNOTE SPEAKERS, MODERATORS AND PANELISTS, H. E. MR PATRICK MÉDECIN, MONACO EXPLORATIONS, PHOTO PROVIDERS, THE CONFERENCE WRITER MS AMY BARRETT, AND ALL THE PERSONS WHO CONTRIBUTED TO THE EVENT.

THE IISD - BRIEFING NOTE (MONACO BLUE INITIATIVE BULLETIN) PRODUCED BY THE INTERNATIONAL INSTITUTE FOR SUSTAINABLE DEVELOPMENT (IISD) REPORTING SERVICES, IS AVAILABLE **HERE**.

OCEANOGRAPHIC INSTITUTE, PRINCE ALBERT I OF MONACO FOUNDATION

Founded in 1906 by Prince Albert I, the Oceanographic Institute is a Foundation recognized as being of public utility. It brings together scientific, political, economic and public stakeholders to promote and protect the Ocean. Under the impetus of its Honorary President, HSH Prince Albert II of Monaco, the Oceanographic Institute contributes to Monaco's commitment to the Ocean, notably alongside the Princely Government, the Prince Albert II of Monaco Foundation, the Centre Scientifique de Monaco, and the Yacht Club de Monaco.

As a vehicle for numerous projects on the national and international scene (symposia, exhibitions, educational programmes, etc.), it pursues its mission of environmental mediation supported by its two institutions, the Oceanographic Museum of Monaco and the Maison des Océans in Paris.

For more information: www.oceano.org

Tel: +377 93 15 36 00

Oceanographic Museum of Monaco



www.facebook.com/oceanoMonaco/
@OceanoMonaco



Oceanographic
Institute

Prince Albert I of Monaco Foundation

PRINCE ALBERT II OF MONACO FOUNDATION

In 2006, HSH Prince Albert II of Monaco decided to create His Foundation in order to address the alarming threats to our planet. The Prince Albert II of Monaco Foundation works for the protection of the environment and the promotion of sustainable development. The Foundation supports initiatives conducted by public and private organizations within the fields of research, technological innovation and activities to raise awareness of the social issues at stake. It funds projects in three main geographical regions: the Mediterranean Basin, the Polar Regions and the Least Developed Countries. The Foundation's efforts focus on three main sectors: Climate change and renewable energies, biodiversity, and integrated and sustainable water management together with the fight against desertification.

The Prince Albert II of Monaco Foundation is strongly involved in marine ecosystem conservation and awareness raising. Indeed, the study and protection of the ocean has been an integral part of the Principality of Monaco's history since the end of the 19th century. In 2013 the Foundation created The MedFund, an Environmental Fund to manage Marine Protected Areas in the Mediterranean. The BeMed project was launched in 2015 to fight plastic pollution in the Mediterranean.

The Foundation also coordinates the Monk Seal Alliance, launched in 2019 by five Foundations to promote concerted action on the protection of the Mediterranean monk seal.

In 2017, the Prince Albert II of Monaco Foundation launched the first edition of the Monaco Ocean Week, a week of debate, analysis and awareness-raising to better understand the challenges facing our future Ocean.

For more information: www.fpa2.org

Tel: +377 98 98 44 44

Prince Albert II of Monaco Foundation



www.facebook.com/FondationPrinceAlbertIIdMonaco/

Twitter : @FPA2

Instagram : @fondationprincealbert2



PRINCE ALBERT II
OF MONACO
FOUNDATION

Contacts

www.monacoblueinitiative.org

Lina Hansson - Pierre Gilles
Auriane Pertuisot
Secretariat of the Monaco Blue Initiative
secretariat@monacoblueinitiative.org

Press Contacts:

Nadège Massé
+ 377 98 98 19 88
n.masse@fpa2.org

Emilie Vitale
+ 377 93 15 36 39
e.vitale@oceano.org

#MONACOBLEUINITIATIVE
#MBI2020

Co-organized by



PRINCE ALBERT II
OF MONACO
FOUNDATION



Oceanographic
Institute
Prince Albert I of Monaco Foundation

With the support of



ROLEX