1ST MEETING OF THE OCEAN AND CLIMATE INITIATIVES ALLIANCE

OCEAN INITIATIVES UNITED FOR THE PARIS AGREEMENT IMPLEMENTATION

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Opening speeches

UNESCO IOC Executive Secretary Vladimir Ryabinin

Welcome everyone to UNESCO; I would like to welcome you for this first meeting of the Ocean Climate Initiatives Alliance.

First of all and with great pleasure, I would like to thank the Ocean & Climate Platform and president Eric Banel and as well as my friend Gilles Boeuf who is representing here the ministry of environment, energy and sea and personally representing Minister Ségolène Royal.

We have really welcomed this new initiative and the idea is to federate a lot of partners, a global vision level and provide a platform for moving together towards at least achieving certain targets that also associate with the Paris Agreement.

For UNESCO this is really important, this is actually part of our mandate which is to coordinate science and find science solutions. When it comes to climate these solutions should be towards mitigation and adaptation of climate change in relation to the ocean.

We have been going towards this day for a long time, for many years actually and the main idea was to raise awareness among key stakeholders, including UNFCCC, and actively communicating scientific findings to the Convention, for example at conference of parties. This resulted, in Paris, in significant breakthrough that climate is reflected in this document that was adopted. We now see there are commitments from many countries, particularly SIDS. Out of 39 SIDS, 38 already have NDCs for coastal ocean.

Science still has a lot to do, there are very important issues, certain gaps in science. In the context of the UNFCCC, we are mostly dealing with issues that relate to management and of course issue of multi stressors. That is highlighted by the Global Ocean Assessment, it is very important.

Then, we also need to move towards certain decisions, managerial decisions. In that particular context, it is important to understand what is the kind of monetary costs that inaction or the loss of health in the ocean creates for the community. When you talk in euros or in dollars, it helps governments to understand that is an important issue. And still there are many fundamental issues in science related to circulation, related to risks associated with climate change, in fact on the ocean. And we hope very much, that many of them will be either highlighted in terms of achievement to be highlighted, in the IPCC special ocean report that is being produced now and also with some initiatives that came from partners in this Alliance.

There is now significant mobilization of our communities. I would highlight both COP21 in Paris and COP22 in Marrakesh. Now we have political support and we hope that a lot can be done in UNFCCC in this domain but I think the idea to add actions to supply scientific expertise to that community is a

valuable idea.

It is now the time to move to more operational solution-oriented mode in what we do with climate. This is exactly one of the ideas behind creating this alliance. In terms of our own activities, this boils down to transfer of marine technology and capacity development activities. It is important that science moves forward and there are new solutions and there are new initiatives now. For example the initiative of the G7 group of countries, moving forward in terms of ocean observations and some scientific solutions related to them. But it is also important that the rest of the world can cope with that development and benefit from advances and variations in science.

We hope very much this is what this alliance will be aimed to do. It is important that we discuss things the alliance will definitely provide a platform for this. I think already this audience is strong enough and the representation is good, it is not only French representation, there are many international partners here. So this is really encouraging.

So, an example of questions that we may address to this alliance could be:

- How could we ensure that this alliance is positioned well and strongly to fit within the UNFCCC process? And by doing so it is able to respond to requirements, aspirations of policy makers and also affecting policy makers?
- So what would be the strategy this alliance could pursue in mobilizing additional stakeholders, also strong stakeholders that would bring value to the alliance?
- Are there other alliances that we could work and benefit from the practices and good experiences?

Previous experience show that there is a burst of activities of any alliance towards COP, so we have to keep this alliance working all the time at pretty high level, with high energy, conference of the parties after conference of the parties. And we are here as a number of stakeholders, representing NGOs but also international organizations, different partners and different interests. It is important to find synergy between all these kinds of stakeholders. Find how we can work together, because our interests are sometimes different but it is the common value that we need to produce.

Actually climate change is in the UN sustainable development agenda, reflected in the SDG13 goal. But this goal is very specific. Basically delegating to UNFCCC all issues related to climate change. But climate change cannot be separated, like ocean cannot be separated, from other SDGs in the agenda of sustainable development. You know, UNESCO will report very much on how we contribute to other SDGs. Even yesterday we were contributing to a document that is called UNESCO in agenda 2030 we analyzed that out of 17 goals directly we contribute to at least 12 goals. So this thing applies for this alliance and working from Climate also will work for sustainable development, and sustainable development work for SDG14.

IOC is the custodian agency in the United Nations system for the target of the Sustainable Development Goal related to ocean acidification and also capacity building and transfer of marine technology.

Last week there was a conference, preparatory meeting for the Ocean conference in NYC. We presented some ideas, how to consolidate the work for all community related to Sustainable Development. There are some issues related to ocean that can be treated managerially, like

pollution. Pollution should be banned. More actions have to be taken to reduce pollution from land.

A lot of things can be done in managerial terms in fisheries but there is a cost-efficiency related to science.

So IOC is developing the concept of a "UN decade of ocean science for sustainable development" toward "the ocean we need for the future we want". This idea is still in making, we hope it will be supported by all communities associated with IOC and all member states.

To conclude, I would like to thank the Government of France and particularly Minister Ségolène Royal, for continuing the ocean climate agenda and for providing the initial work of this Alliance. So we have common goals.

Gilles Boeuf, scientific advisor at Ministry of Environment, Energy and the Sea representing Minister Ségolène Royal

It is very important for us to speak about ocean initiatives united for the Paris Agreement implementation.

The importance of the ocean: 71% of surface area, 3800 meters of averaging depth, representing 99% of the biosphere today.

Today life represented in oceans is very important with approx. 250 000 species and even more.

This biodiversity allows us to extract 170 million tons of resources, including aquaculture and fisheries today.

A recent paper mentioned the migration of sea life in the ocean, which represents something like 72 km every 10 years. The Northern hemisphere to the North, the Southern hemisphere to the South, it actually depends on the animals and plants. For fish species it could be something like 272 km every 10 years. For phytoplankton, there is 470 km migration every 10 years which is equivalent to 47 km every year migrating from the North to the South or the opposite depending on the hemisphere.

The decision to draft an IPCC report on ocean is very important for us to highlight the links between Ocean and Climate.

Minister Ségolène Royal would like to focus on 11 points:

1. Reinforce scientific research. To collect more and more data we need to increase this activity, to supply libraries. More synthesis.
2. Reduce emissions of the international marine transportation
3. True blue growth, better integration. Corresponding to coastal line protection and much better integrated management of our coastline.
4. Small island sustainability.
5. Develop marine protected areas. Today, 22% of marine protected areas for French territories

6. Reinforce protection of marine coastal areas (Many papers mention the role of coastal wetland)
7. Treat marine pollution (plastic)
8. Fight against overfishing
9. International Governance (why 19 COP without speaking about the ocean?)
10. How to protect the open international sea, including deep sea
11. Specific attention to the Mediterranean Sea (which represents a small integrated ocean with all the particularities of all the oceans of the world).

We have to accelerate our actions, this is why you are here today, and we need you. Thanks to you we can imagine a much better future.

Eric Banel, President of the steering committee of the Ocean & Climate Platform,

We are very pleased to welcome you in Paris, in the UNESCO building. All together we have achieved a lot of successes during COP21 and COP22. The ocean is now properly taken into account in climate negotiations but we have to go beyond and to do so we need to begin with what exists already with the initiatives and that we are supporting already. Then we must ask ourselves whether we need something else, whether we need to share our expertise, our experience to build a kind of alliance for ocean. We want to share this aim with you today and we want to bear with you this common initiative, this new trend, this new movement that we have begun to support during COP21 with a lot of you.

So to begin with what exists already, we wanted to have a highlight of the Ocean and Climate Platform which we have set up 1 year and a half before COP21. This will begin with Françoise Gaill.

Françoise Gaill, Coordinator of the Scientific Committee of the Ocean & Climate Platform,

I would like to start with some aspects underlining the importance of the ocean: about 50% of the oxygen comes from the ocean, and about 25% of the CO2 (produced by humans) is also absorbed by the ocean. But there is another aspect, it is the heat, which is the consequence of the warming of our human activities is going to the sea. More than 90% of the heat is going to the sea. So this means that the ocean limits the amplitude of the global warming.

The second thing we have to look at is that there is a great impact of the global warming on the ocean: If you look at the increase of the temperature you can notice the ice is melting. Consequently, this will increase the sea level rise, and also we will have consecutive of the carbon dioxide, the acidification of the ocean and also the temperature of the ocean will increase. So with these impacts, there are also many consequences on the life of the ocean.

So what are the objectives now?

Eric Banel

The three objectives that we have shared within the platform were:

1. Develop scientific knowledge on the link between ocean and climate
2. Raise awareness toward the general public and decision makers on the importance of the ocean as a regulator for the climate
3. Bring the ocean to the forefront in climate negotiations

These are the three points that make us bear this platform all together at a national level and European level and then the international level

During COP21, through advocacy we focused on the following points:

1. Integration of the word OCEAN in the Paris Agreement
   It was the first success. It was a common effort of the Ocean and Climate Platform and the Global Ocean Forum pushing for this.
2. The signature of "Because the Ocean declaration" by 22 countries, led by ocean ambassadors including France, Chile, Sweden, Morocco, Monaco and so on.

At least the work we did, allowed us to obtain the following year an IPCC special report on Ocean and Cryosphere (considering climate).

During COP22, Ocean was confirmed as part of the Global Climate Action Agenda. There was a second "Because the Ocean declaration" with 2 points: integration of the Ocean in the NDCs and support the civil society initiatives to accelerate the action.

Today is the next step. Why do we want this next step? Because we really think we MUST share this expertise, our knowledge and our capacity of action in order to be even stronger and more efficient. This kind of alliance already exists, but we want to focus this alliance on ocean and climate. Thus, we want to bring together international initiatives on ocean and climate. We want to share objectives, we want to valuate results and be initiative in new actions, so its must be solution orientated.

The 3 principles we want to share during this day:

1. Be open
2. Be Inclusive
3. Be collaborative

Roundtable of Ocean & Climate Initiatives

Ocean Acidification

International Alliance to Combat Ocean Acidification by Jay Manning, Pacific Coast Collaborative

- **Presentation**

In 2007 and 2008, the United States Coasts were affected, representing the two largest oyster hatcheries in the world, with almost a hundred percent mortality of the oyster larvae. Through a tedious elimination process, it was identified that a small change in PH of ocean water had killed nearly all of the billion + oyster larvae, two years in a row.
There were very direct economic impacts and ecological impacts, very early on, that prompted the west coast of the States of California, Oregon and Washington to partner up with British Columbia and even provinces to the North. They formed the Pacific Coast Collaborative (PCC). The collaborative was formed to work on ocean and climate issues and ocean acidification.

- **Achievements**

In 2016, this year the Pacific Coast Collaborative launched an Alliance to combat ocean acidification, its title implies an international alliance of governments, national state and provincial cities, counties, ports, First Nations and tribes and non-governmental institutes, businesses, NGOs and academic institutions.

- **2017 goals and 2020 ambition**

These stakeholders are working together to accomplish 3 major goals:

- Elevate the issue of ocean acidification and other climate related threats to the global ocean at the political and policy level,
- Develop and implement ocean acidification action plans in each partner jurisdiction. So every country, every state and province, every city, First Nation and tribe that joins the alliance can develop their own ocean acidification action plan that will outline actions they will take to better understand ocean acidification in their jurisdiction , their region and the actions they will take to mitigate causes, to build resilience and to adapt to climate change,
- Work with partners to help develop strong ocean protection language and work with partners to give that language into the climate agreement that will be developed in Bonn and perhaps in COP meetings after Bonn.

- **What expectations for the establishment of an alliance**

This is a new organization, just launched in early December. There are already 35 partners including, France, Chile, New Zealand and the West coast states of California, Oregon, Washington, the Canadian province of British Columbia, a number of large NGO partners and business partners. We want to work collaboratively with everybody and our objectives and goals are very similar to many other organizations that are in the meeting today.

We believe the Ocean and Climate Platform is a very promising approach to achieving improved ocean protection language into the international climate agreement coming out of COP 23 and we look forward to being part of the coalition and helping to achieve this important outcome.

The Global Ocean Acidification Observing Network by Kirsten Isensee, IOC-UNESCO

- **Presentation**

The Global Ocean Acidification Observing Network (GOA-ON) was established in 2012, including UNESCO-IOC as one parenting organization. The Global Ocean Acidification Observing Network (GOA-ON) is a collaborative international approach to document the status and progress of ocean acidification in open-ocean, coastal, and estuarine environments, to understand the drivers and impacts of ocean acidification on marine ecosystems, and to provide spatially and temporally resolved biogeochemical data necessary to optimize modeling for ocean acidification.

There are 3 goals:

- understand global ocean acidification conditions
- Understand ecosystems response to ocean acidification
- Data to optimize ocean acidification modeling

More information can be found on the GOA-ON website: htpp://goa-on.org

- **Achievements**

The network has gradually increased: in 2012, at the beginning there were about 150 scientists from 31 countries. First quarter of 2016 (for the first workshop in Hobart in Australia) we had more than 240 scientists from 45 countries and we now have more than 330 scientists from 67 countries. We hope we will have a much better coverage in the upcoming year.

- **2017 goals and 2020 ambition**

The new plan will be released in June 2017 ,focusing more on the activities and some concrete plans, including improved biological guidelines for ocean acidification measurements and there is also the new released GOA-ON data portal which really gives an overview of where we have data, it gives real

time data so you can really track the change.
We have to increase our knowledge on the economic impacts of ocean acidification and tourism.
We have to think more about adaptation methods because there are still some significant knowledge gaps.

Take home messages/Actions required:

1. Communities and activities most at risk include:
   - Small scale fisheries and Mari culture in developing countries;
   - Poorer communities and social groups dependent on subsistence fisheries, with potential gender inequalities;
   - Economies reliant on aquaculture or threatened ecosystems, such as coral reefs;
   - Poorly diversified local economies
2. Increase our knowledge on Economic impacts of ocean acidification on tourism: which may include loss of profits and employment, tourist infrastructure due to decreased storm protection from reefs
3. Reduce the root cause of ocean acidification - CO2 emissions
4. We have to think more of adaptation methods because those impacts won't stop right now even though
5. The Governance needs to be reformed , we need to include mitigation and adaptation actions at a national and subnational level, as well as multilateral collaborations, Capacity Building and Technology Transfer
6. There are significant knowledge gaps in the understanding of Ocean Acidification processes and their impacts.
7. Open-ocean models on ocean acidification need to be improved to be applicable to coastal assessment and there are currently very few socio-economic models
8. Ocean acidification impacts need to be assessed in relation to existing trends, e.g. declining labor and incomes in capture fisheries, growth of aquaculture, and the impacts of other environmental stressors like pollution, increased temperature

Marine Ecosystem Resilience: Mangroves, Coral Reefs and Blue Carbon

International Coral Reef Initiative by Xavier Sticker, French Ambassador for Environment and Angus Mackenzie, Australian Ambassador to UNESCO

- **Presentation**

ICRI is an informal network initiative including Australia, France, USA, UK, Japan, etc. It now includes more than 60 members including 37 states spread out in the world and NGOs, scientists, international organizations (UNEP) that has been striving to promote the cause of coral reefs,

mangroves, sea grass and sea grass meadows since 1994.

In the wake of COP21 and the UN agreement on SDGs, France, under ICRI, has been running the secretariat which is a two year responsibility. With the cooperation of all the members of ICRI, the states participants, the NGOs, the International organizations we adopted a plan of action that encapsulates 15 goals with concrete deliverables

- **2017 goals and 2020 ambition**

Take Measures, acting on a global network:

- To promote within IPCC the fact that we would include coral reefs and mangroves in reports. (visible outcomes)
- Involve ICRI member states and set quantified targets to protect coral reefs and avoid deterioration. By now 75% of them are under threat and with deteriorated status.
- To ban micro beads from cosmetics in coral reefs.
- To promote the deployment of mooring devices which protect the reefs.
- To map out the current projects for coral reefs and mangrove to make sure we have no missing links in our support.

Australia, as a founding member is bringing to the table the cutting edge of management practice in the building of resilience in coral reefs.

The Australian Government's reef 2050 plan, which is a long term strategic adaptive management plan for the great barrier reef which is backed by over 2 billion Dollars of funding over the next decade, is a plan which, on undertaking, really has no comparison in terms of its complexity or financial commitment that has been attempted in a marine environment before.

Coming out of this plan: a series of things, including innovations that include work on the world first coding of coral species to help us understand and manage the reefs response to climate change. It includes the largest monitoring project of ocean chemistry in the southern hemisphere. And it includes the development of E-Reefs monitoring system, which is the largest system of its kind in the world.

- **What expectations for the establishment of an alliance**

In context of today's discussions, it is important to note the overlap in synergies between ICRI and the number of many other ocean initiatives that will be presented today, both in terms of its membership, many of the organizations and scientists are working in a number of these initiatives and of their content. And one of the key points that we draw from this, is that the advantage the overlap offers us to leverage various efforts. The ICRI plan of action include a number of areas of work that we think provides an opportunity for greater collaboration and these are the kinds of areas that we are looking to support and we would encourage others to do likewise.

Example: proposed work within ICRI to reintegrate the global coral monitoring network could be supported by monitoring work under other initiatives such as the Global ocean acidification observing network that we just heard about or the global reef partnership that we will hear about.

Likewise in regard to proposed work within ICRI on solutions provided by coral reefs and coastal ecosystems to mitigate and adapt to climate change, developing practical ways to leverage these efforts under various initiatives would be a useful outcome for this meeting and others that will

follow.

The Ocean and Climate initiatives Alliance can be part of the working group and assist us in implementing theme 1 of our plan of action. It could help us to share our work and our needs.

Also, it could play a role in the Year of the Reef 2018.

Global Coral Reef Partnership by Jerker Tamelander, UNEP

- **Presentation**

The Global Coral Reef Partnership of UNEP and the Regional Seas has been developed and established very much in the context of work carried by countries and organizations through ICRI.

The main goal is to secure coral reef benefits in a changing climate by emphasizing coral in a sustainable blue economy by building resilience of ecosystems and by protecting the biodiversity and the ecosystem services on coral reefs.

Coral reef is a particular valuable ecosystem that delivers the highest ecosystem services value of all ecosystems in the world, directly benefiting half a billion people in over 100 countries. And at the same time this is an asset base which is in decline. Reefs are highly vulnerable to ocean warming and ocean acidification and they're very vulnerable to the cumulative effects and other impacts. As well as direct human stresses: At least 2/3 of reefs are under immediate, direct anthropogenic stress.

So it's a very complex problem, much of the pressure of coral reefs from human activities has driven the degradation we've seen to date and it continues to affect some of the most important reefs in our battle against climate change.

The Partnership was initiated relatively late, in 2014, on the request from the Regional Seas Convention and action plans to use coral reefs as a flagship ecosystem for ecosystems based management: the Partnership looks at the world public and private sector governance and management on coral reefs and how it can inform this by good data on status and trends, and in this context its work with the Global Coral Reef Monitoring network is particularly important. The Partnership looks at a better understanding of climate vulnerability, as well as a better understanding of the ecosystem services values and human dependence in a way that enables to use the same decision making.

- **Achievements**

The operational modality of a partnership is really about a global platform for exchange of good practices, also for the development of tools or policy frameworks.

At the regional level, we work primarily through the Regional Seas Convention and action plans and their intergovernmental mechanisms to facilitate adoption of these policy frameworks or the tools that we have developed, and also through that mechanism or national demonstration of pilot projects so that countries can take complete action and scale up what has been done through the

partnership.

The partnership is supported by the US Department of State, Sweden, France and co-financed by industries and the UNEA (UN Environment Assembly) resolution on coral reefs.

- **2017 goals and 2020 ambition**

The partnership is placing emphasis is:

1. Prioritize the identified climate refugia. We've spent a lot of effort to downscale climate model projections for future coral bleaching conditions. This is a key player in prioritizing management spatially but also in terms of which stresses on reefs we need to reduce. It provides one very guiding key framework.

1.1 conservation planning, Marine Spatial Planning, sectorial and cross sectorial spatial planning

1.2 public and private sector vulnerability, adaptation, mitigation

2. Build a much stronger business case for corals
   There is no strong business case for corals. Part of that relation is that we don't have a strong business case although we have pretty good information on how important these systems are not only for people but also for pure economic games for a private thriving sector.

2.1 industry stewardship and investment; a 'Coral Compact'

So we are looking at possibilities of developing a 'Coral Compact' among governments and businesses, that can maybe leverage more work in this area and add more impact.

2.2 Outreach and citizen behavioral change: a growing emphasis on outreach, and eventually we are moving toward citizen behavioral change type activities in the coming years.

3. Ocean governance and sustainable development
   How we can use global processes to make a change for coral reefs. One aspect there is, because of the characteristics of reefs, they're everywhere in the world, in the tropics, they're hugely important to people and many people depend on them. Corals are sensitive climate indicators. We should apprehend coral reefs as an indicator system for climate change but also an indicator system of how well we are doing in our commitments to sustainable development.

The UNEA resolution adopted on coral reefs last year requested an analysis on governance mechanisms and policy frameworks relevant to coral reefs and this is now being initiated. We expect that to guide our work on the governance.

- **What expectations for the establishment of an alliance**

1. This alliance is a strong opportunity for policy advocacy and in this context coral reefs provide a strong climate change story but equally a strong sustainable development story, it

is not either/or. There are two global processes we need to pay close attention to. In this context, reefs are an important indicator of progress in the climate change area but also in the sustainable development area.

2. Get away from coral reefs just as a climate victim which they are but they are also an indicator system for sustainability. The SDG indicator framework is very heavily focused on pressure process indicators not very on ecosystem state indicators. So there is scope for improvement there.
3. In the Paris Agreement the request to IPCC to develop the report looking at the indications of 1.5 degree, which is the aspiration target of the Paris Agreement and here the coral reefs again are very important taking you back to that downscaling climate projection where we see that 2 degrees is lethal for coral reefs, 1.5 degrees is still not a safe space.

Lastly, this initiative, bringing in also quite different entities in an alliance, is an opportunity to leverage slightly more creative partnerships. For example, coral reefs: there is a high level of synergy of what is being done on reefs and what is being done on mangroves and sea grass. It is important to also focus on what opportunities there are in MPAs. MPAs can and should be a key strategy to reducing climate vulnerability, as well as issues related to infrastructure development and migration (key issue: migration on islands).

International Partnership for Blue Carbon by Salvatore Arico, IOC-UNESCO

- **Presentation**

BCI is supported by 3 organizations, IUCN, IOC-UNESCO and Conservation International.

The bottom line is that coastal systems and particularly sea grass systems and mangrove systems play a very important role when it comes to blue carbon in terms of storage.

Critical storage: 83% of the carbon is cycled through the ocean and about 50% of the ocean carbon is restored in coastal sediments.

Initially the initiative focuses on these 3 main systems, and we have clear figures in terms of coverage and loss too. (Annual loss of approx. 2% for sea grass systems, 2% for marshes and almost 2% for mangroves)

For BCI scientific knowledge must be mobilized as well as policy action and linked to public understanding.

The idea here is that with this initiative, essentially scientific knowledge has to be mobilized but also generated, because there are a number of knowledge gaps. This is the niche occupied by IOC, by helping in particular with the science for this Blue Carbon Initiative. It is also linked to the policy agenda and to a large extent to public understanding. And because of that the initiative goes hand in hand with another initiative hereafter mentioned.

Coastal and marine ecosystems are conserved and restored to provide climate change mitigation

Because coastal marine ecosystems are important both from a climate change and mitigation

perspective, that action is taken to make sure that they are conserved and relied upon in order to provide mitigation and adapted capacity for communities globally.

Coastal habitats store huge amounts of carbon both in terms of quantity and the sequestration rate. Often the argument is that if one compares those coastal systems to terrestrial systems such as tropical forests, one would immediately be able to realize the magnitude of the role played by coastal systems in carbon storage. But on the other hand, somehow the same principle applies when it comes to CO2, the carbon impacts of degradation and destruction and disappearance of those systems.

How much is the stored Carbon worth in a global market?

The BCI also includes blue carbon sources and not just sinks. From an economic perspective, when quantifying the corresponding carbon emissions to the loss of coastal systems, there are clear huge impacts from an economic and sustainable perspective.

Blue Carbon NDCs

This is a recent policy study, completed by IUCN and TNC with inputs from other organizations which also feed into the BCI, which talks about NDCs. And because we know that approximately 150 countries are home to coastal systems and 71 of them host the 3 systems which are the focus of the BCI, then if you study the current NDCs there are 28 countries that refer specifically to these systems and 59 that refer marginally to these systems so it is very important that those figures related to Carbon storage and also coastal systems' CO2 emissions are actually taken into account in the NDCs

Blue Carbon and the IPCC

Essentially there is a need to then work with bodies like IPCC on how one would from a methodological perspective take those figures into account.

- **What expectations for the establishment of an alliance**

BCI can provide capacity building assistance to member states which are to honor their commitments under the Paris Agreement, in terms of guidance of blue carbon measurements and in relation to the OCIA we believe that it is a value added initiative and that it provides an opportunity to federate number initiatives which will then have a stronger voice collectively.

International Blue Carbon Initiative by Andrew Willis, Australian Embassy in France

- **Presentation**

Australia along with the Blue Carbon Initiative and a number of other partners was very pleased to launch the International Partnership for Blue Carbon at COP21 in December 2015, here in Paris.

Since then the Partnership has grown, including with the September 26 "Our Ocean" conference in Washington and then also again at COP22 in Marrakesh.

Reasons for setting up the partnership: the substantive scientific knowledge needed and on the ground effects, the importance of Blue Carbon ecosystems in terms of Carbon sinks and also the effects of their degradation in terms of Carbon emissions. They're also extremely important for climate change adaptation. Also in the blue economy, they support sustainably livelihoods and food security. They also play an important role in the health of coral reefs.

The effective management in protection and restoration of blue carbon ecosystems is a complex undertaking and it presents substantial policy challenges for governance. So the strength of the partnership we believe lies in the fact that it brings together governments along with international non-governmental organizations and the science sector to address these challenges.

The work of the partnership rests on three pillars:

- Building awareness on the importance of coastal blue carbon ecosystems in climate change adaptation and mitigation in the international community. The key part of that is in relation to the role of blue carbon ecosystems in NDCs and the Blue Carbon Partnership held a very successful technical side event in COP22 on that issue.

- Sharing knowledge: facilitating the exchange of knowledge expertise and experience to build capacity in blue carbon related policy, science and practical action.

- Accelerating practical actions to protect and restore blue carbon ecosystems in identified regional priority hotspots. E.g.: Australia is supporting a blue carbon workshop for coral triangle initiative countries Indonesia, Papua New Guinea, Malaysia and the Philippines, to encourage great collaboration in that particular region. And there could be potential for that in other regions, such as the Indian Ocean.

- **2017 goals and 2020 ambition**

The partnership consolidated itself last year through expanding its membership and also holding its first meeting in Indonesia in August, where the partnership agreed on its program of action going forward.

In 2017 the partnership will advance work under the 3 pillars of building awareness, sharing knowledge and accelerating practical action. This could include work on bringing together scientists and policy makers, to ensure such meets practitioners' needs; identify tools that need development and identify measures of tools that need to be widely promoted and also look at ways to improve linkages to finance the partnership; the partnership is not a self-funding body but it aims to look at opportunities for innovative finance.

The partnership will also conduct a stop-take of relevant information products, activities products and programs and an assessment of policy-maker and practitioner needs, to guide the focus of the partnership's activities.

The Partnership plans to hold a second meeting in the UAE sometime around the middle of this year, date is TBD.

The partnership also intends to play a prominent role at the SDG14's conference in NYC in June 2017, because it will be a very important event for sustainable management and protection of marine and coastal ecosystems.

- **What expectations for the establishment of an alliance**

The Alliance could leverage but not duplicate existing work and help to fill in the gaps.

The meeting today provides an opportunity to look for synergies and areas where we could work collaboratively with other initiatives. There is a number of obvious ones that have come up through the presentations, for example coral reefs , the ICRI initiative , the work on ocean acidification would be very relevant for Blue Carbon, MPAs of course, ad obviously sustainable fisheries as well.

Marine Protected Areas and Climate Change

MPA Climate Change Sentinels by Marie-Aude Sevin, French Biodiversity Agency

- **Presentation**

An International pilot scheme for observation and action by marine protected area managers
The initiative on MPAs was launched at COP22 in Morocco, reflecting on what could be done with current MPAs and the global existing network.

Three key points:

- Integrate climate change measures into national policies, strategies and planning. Initiatives must be integrated in existing development and economic strategies and plans. Good governance is important.

- Explore new management options: there is no historical analogy at a human scale about the changes happening. We have to adapt fast and explore new management options.

- Raise awareness among all stakeholders: the MPA network is the best place to create consensus, to exchange, because this is an existing network and we can gather a lot of different stakeholders around the same table.

Two main questions rise:

1. How to protect the cultural identity and the way of life of peoples and communities? Without keeping this in mind we are not fighting and we are not responding to climate change.
2. What actions continue to make sense?

The new paradigm of conservation
Smart management of MPAs within climate change: from robust to uncertain strategies
Foster mutual understanding on climate change
Involve MPA managers

Observe small scale changes/ SCIENCES

Ensure that social and economic values are protected/ GOVERNANCE

Create a very strong network of MPAs and Promote cooperation between managers at global, regional and local levels

Strengthen Regional and sub-regional approaches

Tackle common threats and to extend protection (including the high seas)

Capitalize on the social dimension of regional networks

- **Achievements**

This initiative was launched at COP22 in Morocco, and is in discussion with NOAA (USA marine sanctuary) to have a first exchange program.

Also collaborating on an initiative with the IUCN headquarter, the Global and Marine Program, WCPA, to be sure that the framework we will have to design will be the right one and insert all the different countries not only for France, even though we have a large responsibility on the ocean.

There are also ongoing discussions with MedPAN on sentinels site and MPA to expand the view of a climate change. There are some actions already in the Pacific Ocean but for now the priority is to gather all of the information in order to take a step further.

- **2017 goals and 2020 ambition**

- Initiative launched in Morocco at COP22
- From January to August 2017: various workshops with the first one to be held in March 2017 with IUCN, WCPA and MedPAN to define the first framework. Followed by several workshops to exchange with all the regional networks. Planning the action at 3 levels : science, management/governance and communication
- IMPAC4 meeting in Chile in September 2017: presentation of this first framework. Presentation of the MPA climate network pilot sites. Share the protocol with MPAs experts.
- COP23 in Bonn, the goal is to have a first map of these sites of MPA from 15 to 20 sites (worldwide).

- **What expectations for the establishment of an alliance**

- Develop a framework to focus synergies among the existing networks and figure out how to fill the gaps

- Link local stakeholders knowledge and financial needs with the international institutions
- Connect biodiversity and climate changes matters (i.e. CBD and UNFCCC).

Low Carbon, maritime transportation

Navigating a changing climate by Jan Brooke

- **Presentation**

This initiative was created in the Lima-Paris Action Agenda in preparation of COP21 meetings in Paris and deals with the infrastructure for waterborne transport infrastructure, not with the vessels themselves. It involves a wide range of stakeholders who have interest in waterborne transport infrastructure.

The partners:

- The World Association for Waterborne Transport Infrastructure (PIANC)
- International Association of Ports and Harbors (IAPH)
- International Harbor Masters' Association (IHMA)
- International Maritime Pilots' Association (IMPA)
- International Bulk Terminals Association (IBTA)
- Smart Freight Centre (SFC)
- European Dredging Association (EuDA)
- European Sea Ports Organisation (ESPO)
- Institute of Marine Engineering, Science and Technology (IMarEST)
- Inland Waterways International (IWI)

The initiative has four main objectives:

1. To improve sector-wide awareness of climate change, of the challenges waterborne transport infrastructure will face and of potential solutions or opportunities.
2. To create and facilitate knowledge networks, promoting experience sharing and good practice between state and non-state actors at an international, regional and national level .
3. To develop or facilitate the preparation of technical good practice guidance, training opportunities and web-based resources.
4. To provide a coordinated, global focal point: a 'center of excellence' intended to support the owners, operators and users of waterborne transport infrastructure in building the capacity needed to navigate the changing climate.

In preparation for COP21 an action plan was produced: it includes four categories of action in line with expectations of Paris Agreement and Sustainable Development Goals

- Expand network of partners and supporters, **raise awareness** of climate-related issues throughout the sector

- Promote actions to reduce (net) greenhouse gas emissions and encourage a shift towards **low**

carbon infrastructure and operations

- Improve preparedness, **strengthen resilience** and enable the waterborne transport infrastructure sector to **adapt** to climate change
- Encourage new ways of thinking: Working with Nature, and identifying sustainable and **integrated solutions**

Actions include:

- IAPH **World Ports Climate Initiative**: includes carbon foot printing, onshore power supply, environmental ship index
- **Global Logistics Emissions Council** methodology for calculating supply chain logistics emissions; SFC now harmonising methods for ports and terminals
- ESPO **Green Guide** chapter on energy consumption and climate change, EcoPorts tools embed climate change components
- EuDA developing strategy for capture and storage of atmospheric CO_2 '**Blue Carbon**' initiative
- PIANC's Working Group 188 **carbon management** for ports/inland waterways

- **2017 goals and 2020 ambition**

Maritime and inland navigation may need to adapt to:

- Increases in **flooding** frequency or severity due to sea level rise or precipitation changes
- Increased frequency of extreme **wind, wave or storm** conditions
- Changes in **sediment transport**, erosion and accretion
- Potential for changes in fog characteristics or other visibility issues
- Air and water **temperature** increases, ocean chemistry change
- Changes in **ice** cover

Why act?

To ensure navigational safety, reduce downtime, protect business continuity

Action: publish **sector-specific technical adaptation guidance** for ports and inland waterways: PIANC Working Group 178

Coastal areas and coastal populations climatic resilience

Climate Risks early warning system - CREWS by Aurélie Noel, World Bank

- **Presentation**

The Global Facility for Disaster Reduction and Recovery (GFDRR) is a global partnership that helps developing countries to better understand and reduce their vulnerability to natural hazards and

adapt to climate change.

GFDRR is one of the 3 operating partners along with UNISDR. It is a grant-funding mechanism, managed by the World Bank, which supports disaster risk management projects worldwide.
The mission of GFDRR is also to facilitate the implementation of the Sendai Framework for Disaster Reduction which was adopted in March 2015, and also contribute to the achievement of the SDGs in the Paris Agreement. It includes over 400 local, national, regional, and international partners. GFDRR provides Grant-funding knowledge sharing, and technical assistance, capacity building. In 2016, GFDRR experienced projects in 80 countries.

CREWS: Climate Risk Early Warning system (Early warning systems are essential to save populations and assets).

Climate Risk Early Warning systems
Natural disasters have considerable human and financial coasts: in 10 years, 697 695 people killed and 2 billion people affected. 1,400 Billion Euros. It is possible to take action and protect populations. We know that¾ of vulnerable countries do not have effective warning systems.
In March 2015, in Sendai, Japan, the Third UN World Conference on Disaster Risk Reduction took place.

To help vulnerable countries adapt to the impacts of climate change, France has launched the CREWS Initiative (Climate Risk and Early Warning systems). The Overall objective of this initiative is to support developing countries, vulnerable countries, SIDS, who need to have better access to information regarding weather and capacity to generate impact based multi-hazard, gender informed, early warning systems.

CREWS is innovative because it is a partnership/coalition of countries and international organizations specialized in weather and risk prevention including, WMO (World Meteorological Organization), UNISDR, World Bank and the World Bank GFDRR (the Global Facility for Disaster Reduction and Recovery). It aims at putting together some technical and operational strength and mobilizing political attention to address a specific development challenge.

CREWS will finance facilities such as weather stations and radar, to improve prediction of extreme weather events and train specialists. When a threat is identified a warning is sent. Citizens are informed of how to protect themselves and where to seek shelter.
At the same time coordination of various players is improved to increase proximity with populations.

CREWS GOALS:
To anticipate the impacts of global warming
To protect and shelter populations

Since the launch during COP21 and in Sendai (Japan), Australia, Canada and France (chair of CREWS committee), Germany, Netherlands and Luxembourg have pledged all together 30 million USD initiative. France is the biggest contributor with a 10 million euro pledge.
Also other states have expressed interest: Secretariat of African, Caribbean and Pacific group of States, Japan, New Zealand and Switzerland.

The aim is to reach 100 million USD by 2020.

4 projects were approved for 2017:
Manila: ideological and methodological services modernization project (4 years)
Burkina Faso: strengthening national capacity for early warning system service delivery
Pacific region: strengthen ideological early warning services
Coalition of small developed countries and states SIDS: international early warning conference to be held in 2017 in Cancun.

Other projects to be developed in the next month:
- DRC (Congo), Niger
- Monitoring of early warning systems
- Consultation with partners and regional organizations in the Caribbean region

West Africa Coastal Areas Management Program-WACA by Nicolas Desramaut, World Bank and Idriss Deffry, IUCN

- **Presentation**

In 2009, the UEMOA started its regional program to combat erosion, with support from IUCN (provided the master plan for coastal zones in Africa). The master plan was validated in 2011 by the UEMOA and West African ministers. They called for the establishment of a mechanism for observation of western African coasts. In 2012, a West African Observation mission was set up with 11 local teams from each Western African countries (from Mauritania to Benin). A regional monitoring center was established in Dakar with the support of IUCN. The establishment of the mission initiated a partnership of 11 countries and put in place a simplified framework for monitoring and observation of coastal risks. This coalition led to the WACA initiative.

The program was launched at COP21 in 2015, by the World Bank, with the support of the Nordic Development Fund, IUCN and the West African Economic and Monetary Union (UEMOA). This program was initiated in response to requests from Benin, Cote d'Ivoire, Ghana, Mauritania, and Togo to manage coastal erosion and flooding, promote climate-resilient coastal management and improve livelihoods in West Africa's coastal communities.

WACA is a convening platform that helps countries to access expertise and finance to sustainably manage their coastal areas. It is currently working with 9 countries but the aim is to cover the 17 countries in Western Africa (from Mauritania to Gabon, including a few SIDS, Cabo Verde, Sao Tome and Principe).

Coastal West African countries are all facing similar coastal erosion issues: Loss of land, assets and livelihoods.
Data proves that there is a need for efficient and rapid actions because it affects both economic aspects (disaster risk) and coastal communities.

WACA is designed in a way to provide a regional solution, with three main components, Policy,

investment and observation, all supported by a scale up activity:

- Policy

Harmonization: Security, migration, environmental impact assessment
Economies of Scale: Knowledge, policies, practice, fisheries, transport, trade
Regional Institution Building: ECOWAS (Economic Community of West African States), UEMOA, Abidjan Convention?

- Investment

Harmonization: Shared ecosystems (CCLME – Canary Current Large Marine Ecosystem, GCLME – Guinea Current Large Marine Ecosystem), habitat, people, sand river
Economies of scale: solutions, countries specialize as per their advantage
Size: Existence of relatively small coast lines (Togo, Benin, and Guinea Bissau)

- Observation

Harmonization: data standards, analysis, reporting, hardware, networks
Regional synthesis: erosion, flooding, economics, affected people
Regional institution building: *Centre de Suivi Ecologique*, IUCN

- Scale up

Harmonization: a one-stop shop for coastal climate and disaster finance
Economies of scale: Country-led multi-sector investment plans,
Regional Institution Building: Representation, coordination, outreach and communication by the Regional Implementation Unit

- **Achievements**

Technical Assistance: The World Bank and its key partners have started a few years ago technical assistance to better understand the situation from a technical, institutional and economic point of view.

Advisory Services and Analytics (ASA): A few months ago, the World Bank initiated this ASA to engage with the countries.
The first workshop in Lomé (October 2016), supported the development of a regional shared vision.

- **2017 goals and 2020 ambition**

Advisory Services and Analytics

- create a regional shared vision (Lomé, October 2016)
- Launch WACA Platform and Roadmap (Abidjan, April 2017)
- Project Support and Preparation Facility

Investment Project Finance (2018-2023)

- Multi-Country project regional policy dialogue (Harmonization)
- Regional and national investments (Hard, Green, Hybrid, Social)

- Regional and National Coastal Observation

- **What expectations for the establishment of an alliance**

Technical and financial support

Migrations

Ocean, Climate and Human Mobility by Dina IONESCO, International Organization for Migration

- **Presentation**

Four key messages:

- Take stock where we come from: 19 COPs without any mention of the Ocean, 16 COPs without any mention of migration. It took a long time and work to have these two elements visible in the Paris Agreement.
For migration we have a decision that is about loss and damage and a Task force on climate and displacement that is essential to move forward on migration, ocean and climate change.

IOM, 166 member states, 66 years, and it took 64 years to have a division on migration, environment and climate change.
The partnership IOM has engaged with the Ocean Climate Platform (OCP) is part of this strategic engagement to talk about migration today by taking an understanding of climate change.

- What do we know today on migration and climate change and impacts in relation to oceans?
We know that millions of people are affected by climate change and one of the response strategies is migration. We know a lot of migration is internal, regional. We know there are very complex linkages between climate change impacts and migration and we also know that migration impacts the environment.
For ocean: ocean acidification, increasing temperatures, destruction of marine ecosystems, loss of biodiversity, erosion, loss of land, salinization, coastal risks, all impact livelihoods and all can lead to migration.

- Difficulties and challenges that are ahead of us. 26 million people, yearly in average displaced by sudden, onset events, by disasters. Our key challenge today is the complexity of what we have to tackle in trying to understand slow onset degradation of ecosystems, ocean issues but also land, desertification, water stress. We look at this from an inland side because this has an impact on livelihoods and it is related to their vulnerability. We know how many people are exposed in the delta areas to

coastal erosion: 220 million people already live in lowland delta coastlines. But the difficulty is it doesn't mean at all that this would be migrants. We can't project because migration is multi-causal and very complex.

We have to fight with what we see now: the only negative vision of migration when in fact we see migrants, Diasporas and their communities as key players engaged in the fight against climate change, into adaptation. People who can transfer skills about ecosystem rehabilitation

- **Achievements / 2017 goals and 2020 ambition**

- Concrete ways ahead of what we plan

First activity plan: already started with the Ocean & Climate Platform in better understanding the issues: see OCP/IOM information sheet; Input for IPCC on migration and climate change specifically for the ocean document;
IOM has contributed to an article in Diplomacy;
IOM has produced an "Atlas of environmental migrations" with academic partners;
Issues of SIDS, coastal erosion and ecosystem loss: National assessment (example: Mauritius)

Second activity: Raising awareness and advocating for a better understanding of the topic
Targeting COP23: side events, working with states and task force to bring concrete examples
Targeting UN Ocean Conference in NYC in June 2017:
Targeting all the SDGs related process linking ocean, migration, development and related targets and the Global Compact on Migration (to be developed toward 2018) to instill new thinking in migration policy through our understanding of ocean and of climate change and ecosystems.

Concrete action ideas:

IOM is fundraising: cannot provide any funding but is looking for opportunities and has very specific ideas.
IOM concrete ideas are:

- Actions to help people to stay and not to move. Can we invest in ecosystem protection, marine ecosystem rehabilitation, and innovative fisheries strategies that allow people in areas that are degraded and under massive migration pressure not to move?

- Solutions to help people to move. In some cases, in particular for SIDS; planned relocation; about supporting this safe and dignified movement. It's about labor migration schemes for areas degraded toward non-degraded areas.

It is about helping people return. Actions here can be extremely concrete. We can develop our reintegration voluntary assistance return packages and we can support Diasporas in ecosystem rehabilitation.
We think about the identity of people, about their hopes, about their despair, about what they want to do with their lives. It is important to take into consideration both the positive and negative aspects of migration in international negotiations and COP meetings.

- **What expectations for the establishment of an Alliance?**

One of the greatest challenges is access to funding, as there are no dedicated funding sources or donors for this emerging topic, which is at the intersection of environmental and social issues. A joint mapping exercise could be conducted to identify possible donors and innovative funding source.

IOM would also benefit greatly from the Ocean & Climate Initiatives Alliance's wide network of technical experts who could support work on strengthening data collection and evidence, and on developing new methodologies for field assessments and practical solutions.

IOM also welcomes any new ideas and proposals for specific joint activities and programs at the global, regional or national level.

Sustainable Fisheries facing climate change

Sustainable fisheries and aquaculture facing climate change by Manuel Barange, FAO

- **Presentation**

FAO has three goals: eliminate hunger and eliminate poverty and use resources sustainably.

<u>Blue Growth Initiative</u>

Intended Nationally Determined Contributions (INDCs) - basis for negotiations COP21 Paris Agreement on climate change

- Over 190 parties have submitted their INDCs. All of them refer to **mitigation commitments;** 70% include **adaptation** commitments.
- More than 60 countries include **Fisheries and Aquaculture** in their Climate Change adaptation strategies. The level of ambition in these strategies is generally low.

FAO has been working intensively in developing guidelines for climate change adaptation in fisheries at a local and global level (FAO: 250 projects with about 0.5 million USD).

Three areas where adaptation experience is significant:

- Institutional and management frameworks
  Changing institutional networks
- Livelihoods strategies
  Develop alternative livelihood strategies
- Resilience/risk reduction

Focus on resilience and risk reduction

Those three have to be linked.

Solution: Blue Growth initiatives for resilient Fisheries and Aquaculture

Guided by the fundamental principles of FAO and the sound principles of the Code of Conduct for Responsible Fisheries and its related guidelines, the Blue Growth Initiative is consistent with the three dimensions of sustainability: economic, environmental and social. In particular, it is a coherent framework for the sustainable and socio-economic management of aquatic living resources with an emphasis on efficient resource use in capture fisheries and aquaculture, ecosystem services, trade, livelihoods and food systems.

The Blue Growth Initiative aims to create an enabling environment for those involved in fisheries and aquaculture to act not only as resource users but to play an active role in protecting and safeguarding these natural resources for the benefit of future generations.

The BGI addresses four major streams of work: capture fisheries; aquaculture; livelihoods and food systems (trade, markets, post-harvest and social support); and ecosystem services.

This initiative covers a number of countries in Africa, significant number of countries in south Asia, SIDS in the pacific and the Caribbean. Plan of investment with each of these countries and where the investment comes from (regional banks, FAO funding, partnerships). Each of these countries has its plan and objectives (generally in partnerships with other countries/organizations).

African Package for Climate-Resilient Ocean Economies

Objective FAO and the African Development Bank put together and released at COP22 with an objective of raising 3.5 billion USD, to help African ocean economies adapt to climate change.

By 2050 we need to produce 50% more food, so where does our food come from?

Africa

African Package for Climate-Resilient Ocean Economies, by Samba Tounkara, African Development Bank

- **Presentation**

Context

September 2015: SDGs to eliminate extreme poverty from the planet by 2030.

November 2015: COP-21: In Paris an ambitious agreement on Climate Change. African countries commit in terms of development.

Multilateral Development Banks (MDBs) commit to significantly scale up their activities
For ADB: opportunity to reassess the national strategy to focus on 5 key areas: light up and power Africa; Feed Africa (agriculture transformation); industrialize Africa (social aspects); Integrate Africa, Improve quality of life for the people of Africa;

African Ministerial Conference on Ocean Economies and Climate Change, held in Mauritius on September 1-2, 2016 led to the Mauritius communiqué

THE MAURITIUS COMMUNIQUE

"..World Bank Group, AfDB and FAO to prepare a package consisting of technical and financial assistance in support of ocean economies and the resilience of oceans and coastal areas to climate change, including through NDC implementation..."

<u>African Package Focus areas:</u>

Understanding vulnerabilities specific to geographical context
Improve investment for value chains development
Supporting socio-economic and ecological resilience
Carbon sequestration and mitigation efforts
Developing ocean observation systems for early warning and assessment

<u>AfDB action to promote blue economy (mobilization of resources)</u>

<u>Cabo Verde</u>: US $2.23 Million for National Blue Economy Investment Plan, and to develop the world's first wave-driven desalination system (Wave2O™).
<u>Gabon</u>: US $3.7 Million for Gabon Vert initiative, and the country's eligibility to the clean development mechanism. (Marine sanctuaries will be taken into consideration as well)

Mauritius: US $2.728 million to develop the Sea Water Air Conditioning (SWAC) System, and technical study and design of inland terminal for Port Louis Harbor, and planned a Grant of US $1.7 million in 2017 to design a Blue Economy Program.
Seychelles: issue of 'Blue' Bond (US $10 million) and have planned US $1.0 million in 2017 to promote Blue economy.
Morocco: US $1.7 million in 2017 for feasibility studies of Blue Belt initiative.
Côte d'Ivoire : US $1.0 million in 2017 for feasibility studies of Coastal zone management, and mangrove protection.
Guinea: US $1.0 million in 2017 for feasibility studies of Mangrove protection, and Coastal zone management.

Actions to move forward

- Continue to mobilize technical assistance resources to support feasibility studies for innovative programs for the first group of 10 Countries to promote their Blue Economies

- Extend the partnership for the implementation of the Package of Financial and Technical assistance in support of African Ocean Economies and the resilience of Oceans and coastal areas to climate change

- Develop an innovative resource mobilization strategy to address the investment needs to build climate-smart ocean economies in Africa

- **What expectations for the establishment of an Alliance?**

Firstly, donors and partners' mobilization for funding and knowledge development and dissemination.
Secondly, political will from the countries

Europe

European Ocean and Climate Initiatives by the European Commission

Matjaz Malgaz, DG Environment

- **Presentation**

The Commission and the European Union have been and are the champions of climate action and of sustainable development for a long time and in particular before the 2030 Agenda for Sustainable Development.

When the 2030 Agenda for Sustainable Development was being negotiated, we knew the Paris COP was coming up and these 2 processes were aware of each other but they never joined for political reasons which actually turned out to be wise.

It is important to look at how these two actions interact and we need to keep them separated. The commission has recognized the importance of oceans and ocean governance, being discussed by member states and gives legitimacy for action.

- **Achievements / 2017 goals and ambition**

- Ambitious Implementation of the Paris Agreement: We are doing what we can on reducing emissions. It is a given on the intellectual level but very difficult at the political and economic level but we are doing what we can.
- Reducing pressure: as important as we know it is, is not easy, especially for oceans.

- Oceans are a victim of what's going on with climate pressure ad also other pressure. They are also a hero, too often we use them to show something needs to be done. But they are also a hero because they also contribute to mitigation (e.g.: blue carbon)

The notion of resilience is also connected to this hero role of the ocean. There is no actual climate action for resilience but we should pursue what we are doing for resilience, resilience of ecosystems.

More concretely, what are we doing at the European Level and what are we doing with the EU. In terms of Resilience for instance, I would to emphasize that we already have very important marine environment protection policies.
Ex: The European Maritime Regions Facing Climate Change Network.
Launched in 1973, this collaboration platform is led by the Conference of Peripheral Maritime Regions of Europe (CPMR), which implements a wide array of policies and initiatives as an important contribution to the fight against climate change. They also involve concrete initiatives in the field of adaptation in many coastal regions. The CPMR also insists on effective multi-level governance in the implementation of the COP21 climate agreement, in which regions have a key role to play. A bottom-up approach with regional plans for CO2 emissions reduction and adaptation that feed into the National plans can improve accuracy of data and credibility of plans. The initiative thus supports the development of coastal data, of expertise on coastal erosion, of specific strategies for Integrated Coastal management and promotes networking of regional observatories at sea-basin level.

MPA: we have legislation (protection and regulation) and funding, yet not enough is happening.

To move toward SDG 14 we have to use the political momentum ad we have to use the uniqueness of oceans having a special place in the 2030 Agenda. The European Commission together with the foreign representatives will be hosting the Our Oceans conference in Malta. I would like everyone to consider also the commitments you could make there.

- **The role of innovation and science**

There are knowledge gaps and we need to aggregate knowledge better and the role of innovation in finding some answers.
The European Commission has recognized the importance of acting on oceans, as we have issued a policy document: "ocean governance" (being discussed by our member states).

There is also Action 6 which contributes to secure investment for environment and climate policy

and account for the environmental costs of any societal activities.
Adequate investments and innovation in products, services and public policies will be needed from public and private sources, in order to achieve the objectives set out in the program. This can only happen if impacts on the environment are properly accounted for and if market signals also reflect the true costs to the environment. This involves applying the polluter pays principle more systematically, phasing out environmentally harmful subsidies, shifting taxation from labor towards pollution, and expanding markets for environmental goods and services.

- **What expectations for the establishment of an Alliance?**

We are very open to act internationally, we want to bring together these different processes, and we are looking for alliances like this to prove how this can really help us move things forward.

Let's build on what we have, let's stick to what we have committed to and let's join this political momentum.

Pierre Dechamps, DG Research

There are knowledge gaps; innovation is needed, as well as more coordination and cooperation.
The role oceans play as victims and heroes is essential. We need more to understand those things.

In terms of research and innovation: the main instrument is called Horizon 2020 (H2020). It's a research innovation funding instrument, giving out approximately 10 billion euros/year in all sectors.
H2020 is structured in a number of challenges: food security; sustainable agriculture; forestry, marine and maritime challenge; energy challenge; Transport challenge; climate action challenge. There isn't a specific place in H2020 to hold those ocean and climate activities but it's a bit everywhere and mostly for the climate thematic.

Examples:
1. Arctic: this is where Climate Change is taking place faster than anywhere else. It's easy to observe. The EC has a lot of actions looking at climate change in the Arctic, sustainable development and promoting international cooperation. This led to a joint communication on integrated EU-Arctic Policy (adopted April 2016).
2. Earth Observation: data collection, organization, value chains for those data, a collection of projects. One project on phytoplankton, 22 million euros, 60 partners (observing, gathering data to see how things change in the Atlantic).
3. Coalitions: Transatlantic Coalition (Galway Declaration 2013). Its main objective is to help researchers over the North Atlantic.

The Organization is looking at the South Atlantic where the EU has signed an agreement with Brazil, letter of intent with South Africa to come up with a structure to help researchers working over the South Atlantic.
This led to policy initiatives: Blue Growth communication (2012), there will be a Commission staff document to the EU program, international governance communication (adopted in 2016) and the Blue Med initiative (research and innovation for jobs and growth in an around the Mediterranean).
In 2017 we think will be a roll out year for Blue Med initiative.
6 assessment reports finalized in 2022 from science peer reviewed and the IPCC special report on

Cryosphere and oceans will be finalized in 2019.

Sustainable Islands / SIDS

Global Renewable Energy Islands Network and SIDS Lighthouse Initiatives by Roland Roesch

- **Presentation**

IRENA (International Renewable Energy Agency) is an Intergovernmental Organization, based in Abu Dhabi with 152 member countries, 27 signatories/states in accession. It is the global Voice, Advisory Resource and Knowledge Hub for renewable energy

Renewable energy can:
Meet our goals for ***secure***, ***reliable*** and ***sustainable*** energy
Provide ***electricity access*** to 1.3 billion people
Promote ***economic development***
At an ***affordable cost***

Renewable energy for Islands
IRENA membership includes 42 island nations and nations with islands
"Islands lighthouses for renewable energy deployment" is one of six thematic areas in the IRENA Work Program 14-15 and 16-17
Important programmatic activities in AIMS, Caribbean, Pacific region, Mediterranean
Two initiatives: the SIDS Lighthouses Initiative and the Global Renewable Energy Islands Network (GREIN)
Other work relevant for islands:

- Costing and technology analysis
- Project development assistance
- Standards, quality control and certification
- Grid codes
- Capacity building

IRENA has developed the following projects:

<u>Quick scans</u>

Survey on the current status of the enabling conditions for large scale deployment of renewable energy in SIDS.

Outcomes:

- Key barriers to RE deployment remain

- Political leadership and support is widespread
- Development partners are active in all SIDS
- Need for capacity building to produce more quantitative studies and grid integration studies
- Institutional framework requires work in most SIDS
- Access to information generally needs improvement
- Access to finance remains a major hurdle

Renewables Readiness Assessments

Objectives:
Comprehensive review of renewable energy development to improve understanding of the national energy sector
Identification and analysis of key issues associated with the deployment of RE
Present the opportunities for scaling up renewable energy development
Discuss the specific issues to be addressed, and prepare specific policy recommendations
Produce a portfolio of actionable initiatives to be developed
Status:
Ongoing SIDS: Antigua and Barbuda, the Bahamas
Completed SIDS: Kiribati, Grenada, Fiji, RMI, Vanuatu

Island Roadmaps

Goal: develop a comprehensive, action oriented plan supporting a transition to renewable energy for islands

Country driven process: focus varies depending on country's needs
Can cover just electricity or the country's whole energy sector
Can cover the whole country (national roadmap) or specific islands
Different quantitative tools used, depending on approach, sectorial focus, data availability, etc. (e.g. HOMER, MESSAGE, PLEXOS, LEAP, etc.)
Provides specific recommendations to policy makers for implementation

Progress to date:

Road-mapping Baseline Report for Pacific SIDS
Nauru Energy Road Map completed (with GIZ, SPC)
Cyprus renewable energy roadmap completed and published
Maldives renewable energy roadmap completed and published
Mauritius ocean energy roadmap completed
Roadmap deployment support Cap Verde, Vanuatu (with GIZ)
Kiribati RE component of the roadmap completed
Ongoing Barbados

Grid Integration Studies

The Island roadmaps are looking at 20 to 25 years ahead, at actions to be taken regarding Grid

Integration studies.
Facilitate coordination between long-term, policy-driven RE targets and their actual deployment in the grid.
Assessment of reliability and security of the system with planned penetration levels of RE through statistical analysis and electricity grid modeling & simulation
Identification of technical solutions to maintain reliable grid operation
The provision of technical assistance and online access to simulation software-DIgSILENT *PowerFactory* -to do grid studies with local human capacities.

Grid integration studies:
The cooperation with decision makers, network operators and technical experts at a global level is essential to support experience feedback on grid operation and expansion.
Studies with Antigua and Barbuda, Caribbean, Seychelles, Samoa, Cooke Islands, Kiribati,…

Project Navigator

Objectives: Increase the bankability of projects by:

Strengthening the project development base
Enhancing the quality of project proposals
Reducing costs and mitigating risks through proper planning and efficient use of funds
Facilitating effective implementation

2014-2015

- Launched Q2 2015
  - 1500+ registered users
  - Across 178 countries **including 32 island countries/territories**
- Project Navigator Workshop in Cabo Verde
  - Focused on SIDS
  - Identified barriers and needs for development of RE projects in SIDS
  - Agreed to develop technical guidelines for rooftop solar and mini/micro-grid projects
- Workshop on financing for RE in SIDS, Kuala Lumpur
  - Set-up a facilitation platform for RE projects to advance projects and access financing
  - Explore possibility of portfolio approach, bundling small-scale projects

2016

- Technical Concept Guidelines: Rooftop PV, Off-/Mini-grid applications
- Trainings for preparation of draft proposals of concrete project ideas
- Additional P3 to support proposal preparation on islands

Sustainable Energy Marketplace

Match making platform to match funding institutions, multinational development banks, and private development banks with existing power general project proposals.
It tries to bring together countries, host countries, service and technology providers, project developers, and the financers of the project and they make sure that the projects are considered in

all aspects and funded.
Supported projects with EEP, IDB, PFAN, Power Africa

Abu Dhabi Fund for Development
Commitment of up to USD 350 million in soft loans, over seven funding cycles, used solely to finance renewable energy projects recommended by IRENA
First and second cycle: two SIDS out of six countries: Maldives and Samoa (1st), Cuba and St. Vincent and the Grenadines (2nd)
Third cycle winners announced now

Two key publication on Ocean Energy:

Ocean Energy Technology Briefs: Ocean Thermal Energy Conversion
Ocean Energy: Technologies, Patents, Deployment Status and Outlook

Youth

Take OFF – Take Ocean for future by Claire Bertin , Institut Océanographique Paul Ricard

- **Presentation**

The Institut Océanographique Paul Ricard launched Take OFF (Take Ocean for future) in June 2016 for the Institute's 50th anniversary. It is a large global research development Platform

The Institute's research main topics: ecological restoration, integrated multi-trophic aquaculture, antifouling…

It aims at sharing and improving scientific knowledge and best practices for nature-based solutions to keep the oceans alive

Objectives

Supporting young scientists -> International network to support young researchers with Pernod Ricard subsidiaries.

Supporting scientific patronage: companies need to take action and should support scientists.

- **Achievements**

Welcoming students on Les Embiez island at our scientific center

The institute develops sustainable solution for a better relationship between humankind and the sea.

A first partnership with KMOU (Korea Maritime and Ocean University)

Research is essential to our future and the base to knowledge and innovations.

Take OFF actively supports oceanic research (finding solutions for the ocean and climate) and encourage patronage (companies support the arts, they should also support ocean/science) and synergies between scientists and economic stakeholders is good input to increase/spread knowledge, communication.

Youth for Ocean by Julien Voyé

YO is a group of interdisciplinary and international scientists, from very diverse backgrounds (oceanography, biology, law, economy and political science), throughout the world (California, Canada, Norway, France and the Arctic).

Created as part of FACT-O (Franco American Climate Talks on Ocean) and with the support of the OCP.

Three main objectives:

- Provide innovating and proactive perspectives on the links between the ocean, climate change and societies
- Promote a dialogue between science and society
- Seek a better integration of the ocean in international climate negotiations

Alone we can't do anything: we have to gather people to create a collective action

The web and being connected are huge advantages when it comes to providing links between the ocean and climate change.

Consequently we will create a digital network of young people working on the ocean. We will gather ambitions, share practices and knowledge, provide scientific and technical expertise, and all of these objectives are made visible and possible through a digital interface that we want to create to scale up the challenges.

What can we do with this network?

Work in symbiosis with all to exchange nutrients and other inputs and commonly to grow and flourish. With this network we are going to take the opportunity to give a voice to people working on the field and identify ideas, objectives and concerns that young people have to build a plea about youth, ocean and climate.

It is important to speak to the youth via new ways of communications to youth. One of our projects is to develop partnerships with YouTube to spread a friendly, innovative and adaptive message to the youth and to raise awareness at an early stage.

Our generation will face the consequences of climate change. That is why we are present to take a stand on these issues and we push policy makers and civil society to take action and we really welcome the alliance and this process as such.

An Ocean and Climate Initiatives Alliance: what for?

Integrate the climate Agenda

Danielle Magalhaes, UNFCCC

The Marrakech Partnership for Global Action

It started with the Lima-Paris Action Agenda, which was created as a foundation for UNFCCC by the French government.

- **Paris Agreement** statement on the importance of non-Party stakeholder action. (Opened UNFCCC to non-party stakeholders because they have to take a challenge tighter with the party stakeholders) and appointment of the high-level champions (to work on climate action together with the UNFCCC secretariat).

- The **roadmap:** the champions had a roadmap last year and started working on how to establish this new global climate action through a new path of the implementation of the Paris Agreement.

- Consultations with **Non-Party stakeholders** and **Parties** (submissions from parties, events, May SBs, NY climate week, Pre-COP, COP)

- The champions published **Reflections on the way forward** just before the COP. This document serves for a consultation basis during the COP but also a basis for the publication of the Marrakech Partnership.

Marrakech Partnership for Global Climate Action (presented at a high level event through the champions of last year). It is a Framework for continuous engagement of all actors involved in **implementation**:

- Focused on **sectors** (not mitigation and adaptation).sectors are : Land use, oceans and coastal zones, water, human settlements, transports, energy and industry.
- Engage with **all stakeholders** that can influence the implementation of climate action (inclusiveness) (parties and non-parties, by type of actors: policy makers, finance and investment, technology, innovation and capacity building, activity implementers, civil society)
- **Accelerate the scale and pace of climate action** among Parties and non-Party stakeholders to achieve the goals of the Paris Agreement and keep us under the 2°c.

How?

- **Convening** of Party and non-Party stakeholders on an ongoing basis; Making a bridge between the UNFCCC process and the real world;
- **Showcasing** of successes and providing a platform for new initiatives and greater ambition through events;
- **Tracking** of progress, through NAZCA, achieved by those actors and initiatives, aligned towards the achievement of the purpose and goals of the Paris Agreement, and supporting the delivery of NDCs and the SDGs; (some initiative are already NAZCA but if you would like to have your initiative on the platform please contact UNFCCC).
- **Reporting** of achievements and options to enhance action to the COP

We need to complete to bridge and make the dialogue between parties and non-parties stakeholders and implementers.

Global Climate Action 2017

- **Long term goal: input to the facilitative dialogue in 2018** which is a request from the Paris Agreement to present more ambitions from parties.
- **Inputs from stakeholders on priorities-**
- **A coherent rhythm of events (regional, sectorial, intercessional/technical, high-level)**
- **Action oriented reports to the COP under the authority of the champions**

How can we help integrating oceans with the climate process? What are the barriers? Input is highly appreciated by all initiatives in preparation of COP23 (very open COP).

We want to produce some action oriented reports: the roadmap, reports coming out through the champions.

Oceans: bring back the question of "how to integrate?" while it is more "how can we help you to integrate with the climate process?", "what are the barriers that you are taking?", "what are the issues that you have?" The idea is to work together. UNFCCC wants to have a dialogue with stakeholders; UNFCCC doesn't want to work alone. The UNFCCC process on climate change cannot be done alone. To achieve the Paris Agreement, we have to work together.

Mobilize the States and developing Ocean NDCs

H. E. Mrs. Marcia Covarrubias, Permanent Delegation of Chile to UNESCO

The ocean is a vital resource for Chile. Our long coast line is a timeless witness of the strong impact the ocean has had and shall have in the future of Chile.

Chile had the honor to host the 2nd "Our Ocean" conference in October 2015, in Valparaiso. In that meeting we saw how the international community worked together to be bold and bearing and commit concrete actions on the conservation of the ocean.

In our own case, President Michelle Bachelet announced the creation of two MPA in the Desventuradas Island and in Easter Island (with the active participation of the Rapa Nui Communities).

Climate change is a driver of deep changes in the ocean, with lead to the ecosystem degradations, acidification and sea level rise. Unlike other carbon sinks like the forest, the ocean absorbs CO2 at great costs. It should be one of the motivations for ambitious mitigation policies. Nevertheless we know that CO2 emissions will continue growing, and the ocean will keep on absorbing these gases. For this motive, we deem imperative that we also develop and implement adaptation measures and that these policies are shared among implementers.

The next IPCC special report on Ocean and the Cryosphere will provide for vital information both in terms of mitigation and adaptation. The ocean is a key component of the Paris Agreement. Its conservation and sustainable use of marine resources should go hand in hand with a successful response to climate change.

Bearing this in mind, Chile in close partnership with France, Monaco, and many other countries launched the first "Because the ocean" declaration, here in Paris in the margin of COP21. This was followed by the 2nd "Because the ocean" declaration in Marrakesh at COP22. In This 2nd declaration, signatory countries make a call that the ocean is included in NDCs.

This is a crucial advance toward climate change action that is effective and efficient in the following decades at the level of concrete policies. Particularly in the phase of developing countries, the establishment of MPAs should be recognized as a significant national effort. This effort involved consultations with stakeholders, determined possible consultations and implementing new technologies to cost effectively protect those MPAs.

States do have a key role to play in order to use these policies. Climate change is a global

phenomenon but it has very concrete consequences at the local level. Governments need to bring this on board when preparing their NDCs. There cannot be a healthy planet without a healthy ocean.

Chile hopes that more countries will adhere to the 2nd "Because the ocean" declaration. This will lay the basis for a consensus around blue NDCs while at the same time it will prompt a quick answer, which will be a dialogue of stakeholder challenges.

There is no doubt that the IPCC special report on ocean will provide critical information for this purpose. However we believe that the information we already have available, is consistent with the need to take action.

The upcoming conference on the implementation of SDG 14 that will take place in NYC in June 2017, under the leadership of Fiji and Sweden, will be an excellent opportunity to promote this issue. The call for action that will result from the conference will be a test on how important it is for countries to emphasize the relevance of including the ocean in the global response to climate change.

Chile is keen and enthusiastic and looking forward to the realization of this meeting.

Chile is renewing its engagement to continue working with the goals and all the governments and also the stakeholders and actors on this crucial issue. In this context is renewing its commitments and engagement.

Scientifically to scale

Anna Zivian, Ocean Conservancy

What is the importance of scale when it comes to ocean and climate issues?

First there is the question of what we know? Can we say something is true globally? Regionally or locally? And when we develop models to predict future states or to create scenarios, for what scale are we doing so?

Downscaling creates uncertainty, while up-scaling may not be possible.

There is the scale of decision making and governance. Again, are we deciding something at the local, regional or global level?

Depending on the questions we are trying to answer and the scale at which we have the ability to act. Our information needs may be quite different; however we need to match our scientific data to our questions as well as our scale of governance.

Sometimes the issue is not so much whether the information we need is available but whether it is available to the people who need it, in a way that they can use it and in fact are willing to use it.

Here we have a third axis: along with natural science, policy and management, is politics itself.

The policy deficit model: even we design and adopt good policy, it won't automatically work if the

political context changes. That leads us back to the question of "scientifically to scale".

First we need to understand the political, scientific and management contexts we are operating in. And understand what information is most pertinent and effective in those contexts.

Second, we need to be prepared to act on all relevant scales, as Neil Smith and other geographers have discussed to jump scale.

As an example, Ocean conservancy is working right now on ocean acidification and climate change. Questions coming from two directions:

- The international climate debate needs stronger focus on the ocean.
  Here is a case where more information can in fact lead to decision makers who are already concerned about climate change to take more determined actions both on climate change and reduction of other anthropogenic stressors. As part of this effort, Ocean conservancy has been working with Oxford University on a model to explore synergistic and coopering effects of climate and anthropogenic stressors on the ocean. At the same time and especially in light of the fact that the Trump administration continues to make noise about exiting the Paris Agreement, it's unlikely that we will be able to replicate our success working with President Obama's administration to elevate climate and ocean issues at the US national level. That means engaging through proxies at the international level on mitigation; And also, jumping scale downward.
  To that end, we are working on the US west coast, particularly in California where we work, with about a dozen NGOs and state agencies, funders and academic researchers, on ocean acidification and climate change, which is important for several reasons:
- It's a launching pad for progressive ocean climate change policy
- As well as a beachhead for defending climate change policy in response to attacks.
- It's the 6th largest economy in the world.

Scale matters here:

- First the scientific understanding along the west coast allows for informed policy
- Policy makers and managers are working on local and regional adaptation and mitigation, as well as international mitigation
- California is a place you can act when maybe you can't elsewhere. It's a long time environmental leader and innovator.

  Just as this platform is bringing together an alliance of partnerships working on different aspects of similar engagements are happening at the subnational level and the two can support each other very well.

Françoise Gaill, Ocean & Climate Platform

<u>Conclusion of the Ocean & Climate Platform scientific committee</u>:

- The scientific committee agrees about the importance of the alliance.
- This alliance has to consider the interactions between ocean and climate in the context of

the SDG 13 ad SDG14.

- Our main interest will be to consider the question from science to action/ science to policy
  And it can be considered in several ways: Make the world more understandable, Help finding concrete solutions

But we have to try to co-work together: diffuse the knowledge in order to construct with managers but also with policy makers.
There is a new aspect for scientific activity which IOC is doing.

The new initiative of science:
First, it occurs that the work IOC is doing can be an initiative;
Second, we have a lot of scientific research networks (future earth, blue med, blue initiative). The alliance may explain the interest to interact between those networks.
Other aspect: We think that the alliance will need to have a new scientific committee and each initiative is able to give us a name of a scientific community or help us go further.

Questions & Comments

Manuel Barange, FAO: What UNFCCC can do to bring us together? In each country the topic is handled by several ministries (environment, transportation, agriculture…). In the countries, the oceans are not unified until a single political master and that is what makes it difficult. In the UN there are several agencies that have an ocean mandate, and they all need to work together on a unified message otherwise the message gets confused when we go to UNFCCC.

JPI OCEAN: Members states and the commission do not address the same issues, but they can be mobilized through joint cooperation with UN agencies, World Bank or EU commissions.

Danielle Magalhaes, UNFCCC: non-parties and parties need to work together. It needs to be everyone (finance financing research, UN work on one initiative to put on the table).globalclimateaction@unfccc.int

Isabel Torres, Future Ocean Alliance: very difficult in practice, to drive this from one subject and one group if there is no proper funding to move these people together. Funding is mandatory to work together.

Thorsten Kiefer, Future Earth: In response to UNFCCC, we also aim at helping stakeholders by producing knowledge in a more targeted way. So how can we help the stakeholders? In a group like this, it can be more challenging to address this question. Consequently, it is key to tell us what your needs are, and to identify the knowledge gaps.

Ocean Coalition: Ocean experts need to put their climate glasses and speak ocean through climate language and that is very difficult to do. We have to be better at communicating what we mean by ocean and climate change.

Patricia Ricard, Institut Oceanographique Paul Ricard: Large CO2 producing companies are never represented in climate discussions, while they could have a bigger sponsorship on science. What would be the ideal sponsorship between a company and a researcher?

Anna Zivian, Ocean Conservancy: First, earlier today the issues of data availability were mentioned, for example: the massive amount of data that are propriety, that are held by oil & gas companies. It would be wonderful if that were not proprietary data and if that would be shared with academic researchers, public entities, state entities, to be able to have better information. Currently, there is a huge amount of information that is not available.

Second, in terms of coastal and marine spatial planning that is a place where ocean industries have a key role in participating in both providing data and helping plan for adaptation to climate change and for talking about mitigation.

Benchmark of existing alliances

Construction

Global Alliance for buildings and construction by Frédéric Auclair, UNEP

It was created at COP21, with a form of bet. The question for us is to build in hot and cold climate, where there is already a lot of buildings and other regions where you have to build many buildings. The situation varies from one country to another. But it was a bet to say there is something to do because there is 20-30% GHG emissions in building sector (heat or coolness of the building is the reason why it's so high).

It is important to connect the idea of biodiversity &ocean with sectors. The success was to speak about the building as a category. There is a question of consciousness. It is complicated because there isn't one ministry in charge of building but several (energy, culture, housing…). The idea is how we make it together to slowly organize at the global level the fact that we have all together something to do for the building.

When creating a building, there is a chain of process (customers, insurance, inhabitants…). The idea for the members of this global alliance for building and construction was to have those interactions, which means we have state members (24 countries) involved and non-state actors (approx. 72

members) involved (industrials, finance, institutes, regions, NGOs, municipalities,…). We have to try to make a common denominator

How do you create the biggest common denominator to make things change? It's difficult.

Every time we speak about time, time is running. It is very difficult because the level of capacity and desire to move is not very clear. For the north hemisphere we have a task to show how we can go. It's difficult.

Today in cities, there are max 2-3 green buildings. There is always a mix between the need for construction and how it is going to be built. We know it is very difficult. We were speaking about consciousness, how we manage education and awareness, training. How we managed public policies relative to the NCDs. How we organize a market transformation because we are on a global level.

There is a question of finance. What does it mean to have a green building? When using passive and active solutions in architecture, clean energy (solar energy…) and slowly you know you need more money. Until now, there is not so much money in the building industry because there is corruption.

There is a question of measurement. There are things to show. What's new since COP21? We started with a global status report, what is the situation in the world. So slowly we collect all the data we can and we show it on maps for world citizens and more technical stakeholders.

Then there is a diagnosis, to see what the solutions are to go fast, to have less energy use to build and eat and then you have a global road map.

Transportation

Paris Process on Mobility and Climate by Patrick Oliva, Michelin

The PPMC is a collaborative public/private advocacy Platform, on innovative multimodal mobility of people and freight transport. It is a collaboration between the private Michelin Challenge Bibendum (founded in 1998 to separate mobility from fossil fuels especially in cities) and the public Partnership on sustainable low carbon transport (SlowCat - created in 2009, to gather all the transport hub that existed within UN agencies-UNEP, UNDP, ILO…+ NGOs+ development banks).

The PPMC was created in 2015 to structure COP21 GCAA Transport Focus and to launch the 2015-2020 Action Agenda for Mobility and Climate. (COP21 LPAA, COP 22 GCAA)

3 objectives/actions:

1. The Paris Objective was very clear: what do we do between 2020 and 2060? If the technologies we had in 2060 were that of today, how would we organize the transition on 40 years? How would we phase the transformation? Using what we already know, instead of wasting time with more studies.
2. Quick Wins pre 2020: In order to be on the 2020-2060 plan, there are things to do before 2020
3. Fostering and levering initiatives

Most importantly, a macro roadmap for the next 40 years is necessary, to align efforts, to structure

and to help initiatives find synergies.

Publication in Marrakesh (cop22) of a discussion paper, presenting a report on the three points mentioned above: “An actionable vision of transportation decarbonization. Implementing the Paris Agreement in a global Roadmap aiming at net zero emissions transport”.

The macro Road map is a focal point to organize the reflection of public authorities (targeted public policy is expected). The private sector must coordinate to support investment.

Roadmap: 8 priorities to decarbonize transport by 2050+

Implementing the Paris Agreement in a Global Roadmap aiming at zero net emission Transport

1. synergic urban transformation
2. Low carbon energy supply strategy
3. Modal efficiency improvement
4. shortened supply chains
5. Unnecessary travel reduction
6. Adapted solutions for 'rural' world
7. Investment in adaptation
8. Economic instruments

8 priorities with two time scales: trail blazers/OECD (developed countries) and fast followers (Less developed countries).

2017 goals and 2020 ambitions

Toward COP23: strengthening this macro roadmap and develop it into 3 regional roadmaps (Europe, Africa and South America) with 3 targets: obtain support from governments, businesses and society (social networks, include youth).

Transportation must be connected to other areas: energy, agriculture, ocean (90% of international transport is done via oceans).

The Paris Agreement is based on a zero emission economy but in 2060 we still produce emissions but we know how to compensate: therefore, the solutions are in the ocean (absorption capacity, regeneration…).

UNFCC and the COPs have done a great job but it is now time for ACTION. Intermediary organizations have to take over: EU, OCDE, G20, UN Agencies because the climate issue is connected to many other issues (transportation, water,…)

Water

The Alliance of Megacities for Water and Climate by Blanca Jimenez Cisneros, UNESCO

According to the UN definition, Megacities are cities with more than 10 million inhabitants(ex: New

York, Tokyo). New megacities created between 2014 and 2030 will all be located in the least developed countries and regions.

The number of megacities increases:

- 3 megacities in 1970
- 10 megacities in 1990
- 28 megacities in 2014
- 41 megacities in 2030

Megacities are generally located with access to water both for resources and for trade. Therefore many megacities are coastal cities.
Megacities:

- Have a major impact on regional and/or national resources including water
- Contribute to significant economic activity
- Are responsible for massive environmental pollutions
- Seldom have simple governance models
- Concentrate many stakeholders: Decision makers, Utilities, Research Centers, NGOs, private sector,…
- Maximize Social Inequities
- And will bear the most adverse impacts of Climate Change

The Alliance of Megacities for Water and Climate, is an initiative from UNESCO-IHP, ARCEAU-IdF and ICLEI (SIAAP has joined the partnership) launched in Paris during COP21 (December 2015). It is a platform for cooperation, involving operators, researchers, stakeholders and civil society.

Three main objectives:

- Collect and disseminate information at a worldwide scale on strategies and operational plans developed by local authorities and their water operators, as well as results achieved by their implementation

- Facilitate experience sharing between the academic community and water operators in improving adaptation through best practices assessments

- Identify means and mechanisms for funding the adaptation of Megacities to the impacts of climate change on urban water

Following this event, the alliance has released several assessments of Megacities

The Alliance has produced a book targeting policy makers “water megacities and global change” (information about climate change and water and the alliance)

Two problems observed in megacities: sea level rise and floods (affecting not only coastal cities.eg: Paris).

Expand this megacities alliance targeting not only megacities but also smaller cities.

Megacities alliance is now part of a bigger alliance: Alliance on desalinization and working on basins,

only for the private sector (name of alliance still in discussion). The alliance is working on drafting a document for the climate community to communicate in the same language.

A Regional approach for cities is engaged since Megacities from a given region often share environmental, cultural, legal, climate, and institutional similarities.

The Global Alliance for Water and Climate was created during COP22, November 2016, in Marrakech. Synergies, larger outreach, complementary networks of experts, and common projects are explored between **partners from several Alliances.**

The Business Alliance for Water by Jean-Pierre Maugendre, Suez Environement

Presentation

Managing water risks: a growing issue for companies

Risk: 61% of responding companies report exposure to water risks including increased water stress (11%), drought (11%) and projected water scarcity (9%)

Opportunities: ? Of responding companies report water presents opportunities that could benefit the business, including improved water efficiency (17%), cost savings(16%) and increased brand value (11%).

The Business Alliance for Water and Climate: a joint initiative led by SUEZ, CDP, CEO WATER MANDATE and WBCSD.

This Alliance was launched on December 2nd 2015 during the Resilience Day of COP21 within the Lima-Paris Action Agenda.

Endorsing companies are committing to one or several of the following levels of ambition:

- Analyze and share water-related risks to implement collaborative response strategies
- Measure water footprint with existing standards
- Reduce impacts on water availability and quality in direct operations and all along the value chain

ALLIANCE FACTS:

- 4 founding partners: SUEZ, CDP Global Compact of the United Nations (CEO Water Mandate), WBCSD
- 46 participants: 68% of private companies, 20% of NGOs, 7% of business organizations and 5% of research institutes / learning centers (all technical areas and geographical zone)
- 32 signatory companies representing a total aggregated income of 700 billion US dollars from the 5 continents

Achievements

The Business Alliance for Water and Climate is one of the 4 initiatives included in the Global Water Action Coalition supported by the Global Climate Action Agenda. The Global Water Action Coalition (500 actors, 400 local governments, 40 businesses, 70 river basins) was created as an alliance to exchange good practices and actions.
BAFWAC appointed as a partner of the GCAA Water Day of COP22 on November 9th

Goals and ambition

- **First milestone: secure 100 corporate signatories by 2018 representing $1 trillion in revenues.**
    - To date, more than 30 companies across 5 continents representing $700 billion in revenues have joined BAFWAC and committed to take action
    - We have partnered with "We Mean Business" through its Commit to Action campaign to launch the first water-related commitment that will increase the number of signatories

- **Second milestone: to catalyze and facilitate effective water action**
    - Technical workshops and webinars have been held
    - Best practice information and dissemination platforms have been created
    - Monitoring and tracking of progress against commitments is underway
    - Collaborative action opportunity identification is underway

Strategic roadmap to ocean and climate action 2016-2021

Julian Barbiere, IOC-Unesco

The idea was to influence the Policy setting of UNFCCC on how to better integrate the ocean in climate discussions, recognize the central role of the ocean and policy recommendations.

The work started at Oceans Day at COP 21, presented at Oceans Action Day at COP 22

The report: 37 authors from around the world. Foreword by Ambassadors Jumeau (Seychelles), Friday (Grenada), and Otto (Palau). It was presented in Marrakesh at COP22.

The Strategic Action Roadmap 2016-2021 addressed: Central role of oceans in climate, mitigation, adaptation, displacement, financing, and capacity development.

For each issue, the roadmap examined:
- the current status of the issue (and, as relevant, the science related to the issue)
- the current state of play of the issue within the UNFCCC
- the opportunities and pathways that may be available within the UNFCCC to advance the issue in the next five years
- the opportunities and pathways that may be available outside of the UNFCCC to advance the

issue
- financial considerations regarding each issue

Policy recommendations focused on:
MITIGATION: develop and apply mitigation measures using the ocean

- Conserve and sustainably manage coastal ecosystems as major carbon sinks and integrate the management of the coastal carbon ecosystems ("Blue Carbon") into the policy and financing processes of the UNFCCC
  - Account for these ecosystems in the national reports to the UNFCCC, the INDCs (Intended Nationally Determined Contributions)
- accelerate progress in addressing air emissions from ships
- Sustainably develop ocean-based renewable energy
- Consider potential for ocean-based carbon capture and storage with appropriate regulatory measures

ADAPTATION: promote ecosystem based adaptation strategies

- Adaptation measures should be carried out through the integrated coastal and ocean management institutions and apply ecosystem-based approaches to adaptation (100 nations coastal management, 40+ nations EEZ management)
- Establish and effectively manage coherent networks of marine protected areas to protect marine biodiversity and to enhance resilience of marine ecosystems to climate change
- Follow the global Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries, taking into account the differential impacts of natural and human-induced disasters and climate change on small-scale fisheries

Promote Blue Economy: Promote and apply *Blue Economy approaches* with emphasis on low-carbon solutions and economic benefits to developing countries and SIDS (following SDG target 14.7)

DISPLACEMENT: Estimate the current and projected figures climate-induced displaced populations

Develop and support measures to address the issues associated with the displacement of coastal and island populations as a result of climate change, which will necessitate improvement of international law in terms of definitions, rights and procedures for climate-induced refugees and migrants, including the development and implementation of financing measure.

FINANCING: adaptation and mitigation in coastal and SIDS (countries and communities) should receive funding through

- Thorough examination of *assessments of costs of adaptation, mitigation, and displacement* (existing assessments inadequate, for example, do not account for ecosystem services)

- Development of a *financial tracking mechanism* to report on financial flows to support climate change efforts related to oceans and coasts

- *Earmark funds in global public finance mechanisms* to support adaptation and mitigation in

coastal areas and SIDS

- *Earmark private sector investments* (e.g., work with the private sector to earmark 10% of investment in "gray" coastal infrastructure for coastal habitat protection and restoration)

CAPACITY DEVELOPMENT: Provide technical and financial assistance to SIDS, developing countries, and economies in transition to build capacity (tools, knowledge, and expertise)**.**

- Promote marine policy centers in developing countries and SIDS to build capacity in management and policy related to oceans and climate
- Strengthen the advancement of global marine observations, research, and related capacity development within the UNFCCC processes and beyond

    a. Support the creation of the IPCC report on Oceans—
    b. Sustained ocean observation should be included as part of national commitments, particularly within the framework of the UNFCCC and Agenda 2030/ SDG 14.
    c. Enhance technical capacity development of vulnerable countries through the establishment of regional oceanographic centers to increase cooperation among States on ocean-climate research and multi-disciplinary observation (in accordance with SAMOA Pathway decision 58.f)
    d. Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels and the further development of the Global Ocean Acidification Observing Network.

- Expand public outreach and education efforts, following the Lima Declaration on Education and Awareness-raising (COP 20, 2014).

2017 Goals

Roadmap to Oceans and Climate Action (ROCA) Initiative to implement the 5-year Action Plan, 28 partners

Two main inter-related emphases: 1) advancing the overall cross-cutting Roadmap agenda (on mitigation, adaptation, displacement, financing, capacity development), and 2) advancing the Blue Economy– concepts, principles, experiences, modes of innovation, on-the-ground actions

Initial Policy Activities:

Related to the UNFCCC, visits to the UNFCCC Secretariat late March, work with the two High-Level Champions, Co-organize COP 23 Oceans Action Day

Related to the UN Ocean Conference, high-level side event February 15, 2017 and at the June Conference, announcement of the Initiative

Substantive Priorities for 2017

1. **April 20-21, 2017:** Planning meeting to operationalize the Roadmap (on mitigation, adaptation, displacement, financing, and capacity development, and on means of tracking

progress on these)

2. Report on NDCs (Nationally Determined Contributions)

Review the oceans and coasts content of NDCs submitted by nations (2/3 of all NDCs submitted cover oceans, 38 of 39 SIDS NDCs address oceans). Determine how these can be supported and realized.

Special focus on Blue Economy

Develop a guide for nations on the inclusion/consideration of oceans/coasts in their future NDCs

3. Financial Tracking Mechanism

Development of a Financial Tracking mechanism to examine and report on financial flows to support climate change responses in coastal and SIDS countries/communities

Conclusions

The objectives of the Ocean and Climate Initiatives Alliance

- Be a driver to keep the momentum started with the Paris Agreement, a voice of ocean in climate negotiation and action;
- Mobilize international funding agencies, UNFCCC and the states to strengthen the ocean initiatives for the implementation of the Paris Agreement;
- Promote a better integration of the ocean in the NDCs;
- Support a common strategy of United Nations agencies on Ocean

The OCIA should:

- Federate the initiatives to give ocean a stronger voice;
- Share a common language, share expertise with a common understanding of the ocean;
- Avoid overlap not to duplicate what exists;
- Encourage collective action: facilitate relationship, exchanges between thematics and partnerships;
- Focus on actions, concrete projects;
- Be driven by science, include the human aspect and not just raw science;
- Include the economic aspect (investment, economic impacts, be a business incentive);
- Design a process to propose to some countries / regions a roadmap with guidelines;
- Make emerge new initiatives and projects.

Which thematics ?

Proposed Themes

1. **Ocean Acidification**
2. **Marine protected areas and climate change**
3. **Marine ecosystem resilience : Mangroves, Coral reefs, Blue Carbon**
4. **Sustainable fisheries and aquaculture facing climate change**
5. **Low carbon maritime transportation and activities**
6. **Marine renewable energies**
7. **Coastal and coastal populations climatic resilience**
8. **Migrations**

Cross disciplinary

9. **Science**
10. **Youth**

Focused regions

11. **Africa**
12. **Mediterranean**
13. **Sustainable Islands and SIDS**

2017 Objectives

- **Determine a common objective**: a core objective (quantitative and date) highlighting the cost of inaction. With two terms: short and medium/long term goals;
- **Valuate the Ocean and Climate Initiatives** in the main international ocean events
- **Produce an Ocean and Climate Action Agenda report** to follow the progress and the results of Ocean and Climate initiatives for the UNFCCC COP 23;
- **Create a website** on initiatives and projects with an interactive online hub/tool (per theme, stakeholder, region, activity) integrating existing initiatives.

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