Summary of Draft Policy Recommendations on Oceans and Climate

International Working Group on Oceans and Climate (Coordinated by the Global Ocean Forum)

Introduction

This summary represents a set of draft policy recommendations emerging from the ongoing work of the International Working Group on Oceans and Climate, coordinated by the Global Ocean Forum, to prepare a Policy Brief on the major oceans and climate issues and to begin the process of discussion of a framework for developing a strategic action plan on oceans and climate for the next five years. The Working Group, composed of 36 experts from the Oceans Day partner organizations, as well as from other relevant organizations, is addressing 5 major oceans and climate issues (the central role of oceans in climate, mitigation, adaptation, financing, and capacity development (including scientific assessment and public education). For each of these major issues related to oceans and climate, experts have been asked to analyze: 1) the current status of the issue (and, as relevant, the science related to the issue); 2) the current state of play of the issue within the UNFCCC; 3) strategic goals and actions to address the issue; 4) the opportunities and pathways that may be available within the UNFCCC to advance the issue in the next five years (e.g., in which processes/bodies, e.g. Subsidiary Body for Scientific and Technological Advice (SBSTA), Ad hoc Working Group on the Durban Platform for Enhanced Action (ADP), the Nairobi Framework); 5) the opportunities and pathways that may be available outside of the UNFCCC to advance the issue; 6) financial considerations regarding each issue.

Please note that this effort is open to all participants from governments, international organizations, NGOs, and private sector wishing to contribute to advancing the issues related to oceans and climate, both within and outside the UNFCCC, in the next five years (please contact Dr. Miriam Balgos if you like to participate at miriambalgos@globaloceans.org).

International Working Group participants will present “stage setting papers,” based on this joint work at the Oceans Day at COP 21, on the following panels: Panel 2. Addressing the Effects of Climate Change on

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Oceans and on Coastal and SIDS Populations, Panel 3. Mitigation and the Oceans (papers on ocean-based mitigation and on financing for adaptation and mitigation), and on Panel 4. Adaptation. Please note that this work is in draft form, and that a completed version of the Policy Brief will be available for review at the end of December 2015. These draft recommendations are presented at the Oceans Day at COP 21 and at the other ocean events noted below to solicit input and to begin to create “alliances of the willing” to develop a strategic action plan on oceans and climate for the next five years, to develop and carry out actions within the UNFCCC and outside of the UNFCCC. The strategic action plan will include recommendations for action steps: i.e. what action steps are needed, who will carry out each action step, by when will it take place and for how long, what resources will be required.

Oceans Day at COP 21 participants are invited to participate, as well, in the following meetings during COP 21 to discuss possible next steps on oceans and climate issues within and outside of the UNFCCC for the next five years:

--December 3, 11:15 to 12:45, Red Zone (during the Ocean and Climate Forum), Toward a Strategic Plan on Oceans and Climate: Beyond COP 21, Room 8.

--December 7, 16:45 to 18:15, Blue Zone, The Importance of Including Oceans and Coasts in an Ambitious Agreement at the UNFCCC COP21, Room 2.

--December 8, 11:15 to 12:45, Red Zone, The Importance of Addressing Oceans and Coasts in an Ambitious Agreement at the UNFCCC: Mobilizing Towards Implementation, Room 5

Comments on the draft recommendations are kindly invited as are offers of collaboration to develop and implement the five-year strategic plan on oceans and climate, please send these to Dr. Biliana Cicin-Sain, Global Ocean Forum, bilianacicin-sain@globaloceans.org.

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1. The Central Role of Oceans in Planetary Survival and in Human Economic and Social Wellbeing: Choices for Decisionmakers

1.0 Adopt stringent reductions in greenhouse gas emissions to avoid disastrous consequences on coastal and island communities, marine ecosystems, and ocean chemistry

The ocean is central to climate--it is the primary regulator of Earth’s climate and weather, produces 50% of the oxygen in the atmosphere and fixes 50% of global primary production. It especially influences the climate through the regulation of the amount of CO₂ and heat in the atmosphere. Currently, the ocean has taken up nearly 30% of anthropogenic CO₂ emissions, over 90% of the heat generated by warming of the Earth system over recent decades and all the water from melting ice. Yet, if sufficient reductions of greenhouse emissions do not take place, the ocean will no longer be able to play these central functions.

Coastal and island populations are at the frontline of climate change, and will suffer disproportionate impacts. Sea level rise poses serious risks to island communities, potentially covering islands entirely and displacing populations. Fisheries will be affected by changes in ocean temperature and chemistry, posing risks to food security and livelihoods. Ocean acidification will change the chemistry of the ocean, impacting

2 These recommendations are emanating from the work of the individual authors of the Policy Brief noted in footnote 1. Any errors or omissions are the responsibility of the authors. The views expressed in these recommendations do not necessarily reflect the views of each of the organizations co-sponsoring the Oceans Day at COP 21.

fisheries, corals, and molluscs, as well as sensitive areas such as the Arctic, and will have significant effects
on the economy and food security of coastal and island nations around the world.

Therefore, reductions in greenhouse gasses must be made in order to reduce the effects of climate change on
the oceans and reduce the risks posed to island and coastal populations, as well as to coastal and marine
ecosystems.

Main Findings

The ocean and coasts provide critical ecosystem services, including biogeochemical and physical processes,
making the ocean critical for planetary survival.

The ocean provides essential proteins and nutrients to over 4 billion people around the globe; disruption of
ocean processes will impact food security and livelihoods.

Increased intensity and frequency of storm surges, sea-level rise, increased coastal flooding, and increased
exposure to pathogens, will significantly impact the safety and security of coastal and island communities,
human health and food security.

Climate change could result in the displacement of an estimated 50-200 million people by 2050.

The risks of climate change are non-linear, and gradual changes in emissions could rapidly increase risks.

Risks to humans depend on how well emissions are reduced; however, even the lowest emission trajectories
show a 33% chance of exceeding the 2°C target and pose serious risks to the survival of marine species,
such as corals and bivalves.

2. Mitigation

2.0 Further develop and apply mitigation measures using the oceans, including implementing “blue
carbon” policies, reducing CO\textsubscript{2} emissions from ships, developing ocean-based renewable energy, and
considering ocean-based carbon capture and storage.

2.1 Conserve and sustainably manage coastal ecosystems (e.g., mangroves, seagrass beds, salt
marshes) as major carbon sinks, and integrate the management of the coastal carbon ecosystems
(“blue carbon”) into the policy and financing processes of the UNFCCC as a major tool for climate
change mitigation

--Account for the contribution of coastal ecosystems as greenhouse gas emissions and
removals in the Intended Nationally Determined Contributions

2.2 Further accelerate progress in addressing air emissions from ships

2.3 Sustainably develop ocean-based renewable energy (such as offshore wind power, wave energy,
tidal power, and aquatic biofuels); and accelerate efforts to implement these approaches through
integrated marine planning and enhanced regulatory frameworks

2.4 Consider the potential for ocean-based carbon capture and storage, and, if appropriate, further
develop regulatory systems for ocean-based sequestration and marine engineering
3. Adaptation

3.0. Implement ecosystem-based adaptation strategies through integrated coastal and ocean management institutions at national, regional, and local levels to reduce vulnerability of coastal/ocean ecosystems and of human settlements, and build the management capacity, preparedness, resilience, and adaptive capacities of coastal and island communities.

Adaptation efforts in coastal and island communities in 183 coastal countries and SIDS which are at the frontline of climate change should:

3.1 Be carried out through the integrated coastal and ocean managementmarine spatial planning institutions created at national and local levels in all regions of the world since the 1992 Earth Summit, in close cooperation with disaster risk agencies and affected sectors and communities

3.2 Apply ecosystem-based approaches to adaptation, especially regarding green infrastructure to provide natural system protection for defense against sea level rise, storms, and flooding

3.3 Establish and effectively manage coherent networks of marine protected areas to protect marine biodiversity and to enhance resilience of marine ecosystems to climate change, achieving, at a minimum, the Convention on Biological Diversity’s Aichi Biodiversity Target of conserving at least 10% of marine and coastal areas by 2020

3.4 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

3.5 Be cognizant of 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; paying particular attention to vulnerable and marginalized groups and the need to support the progressive realization of the right to adequate food

3.6 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)

4. Financing

Adaptation and mitigation efforts in coastal and island communities in 183 coastal countries and SIDS which are at the frontline of climate change should:

4.0 Receive sufficient funding to support adaptation and mitigation efforts related to ocean and coastal areas/human populations, including through:

1) directing a significant portion of the current climate funds to coastal and SIDS issues
2) considering creation of a special coastal adaptation fund
3) developing supplementary financing to support adaptation and mitigation efforts through innovative approaches and partnerships
This will entail:

4.1 Examination of assessments of the costs of adaptation and mitigation in coastal countries and in SIDS to inform planning and implementation of adaptation and mitigation programs

--For example, existing estimates of the costs of adaptation in coastal areas and SIDS have been found to underestimate the investment needed, and to be fragmented and incomplete, e.g., cost estimates for sea level rise typically focus on infrastructure damage but do not address saltwater intrusion in coastal aquifers and the destruction of habitats that support fisheries and aquaculture

--For example, what will be the costs of ocean-based mitigation; e.g., costs to integrate Blue Carbon into coastal and ocean management, costs of mitigation efforts by the shipping industry, costs of renewable energy, and costs of carbon capture and storage (CCS)?

4.2 What financing measures will need to be developed and supported to address the issues associated with the displacement of coastal and island populations as a result of climate change?

--The dimensions and magnitude of this central problem are only beginning to emerge; attention at global and national levels needs to be focused on this issue, including on means of financing the consequences of climate-induced population displacement

4.3 How to ensure the continued provision of sufficient funding to support adaptation and mitigation efforts in coastal and island nations/communities?

Some possible alternatives for additional study/discussion/consideration:

--Development of a Financial Tracking mechanism to examine and report on financial flows to support climate change responses in coastal and SIDS countries/communities. This could, for example, include tracking ocean adaptation projects and their implementation within National Adaptation Programs of Action (NAP)

--Earmark funds in global public finance mechanisms (such as the Green Climate Fund) to support adaptation and mitigation in coastal areas and SIDS

--Earmark 10% of investment in “gray” coastal infrastructure to be directed towards coastal habitat protection and restoration

--Develop and implement private sector initiatives as voluntary mechanisms to generate funding for ocean adaptation

5. Capacity Development

5.0 Provide technical and financial assistance to SIDS, developing countries, and economies in transition to build capacity in the form of knowledge, tools, and scientific and political expertise to implement mitigation and adaptation measures, develop adaptive management capacity, early warning systems, and disaster risk reduction, and to develop knowledge management mechanisms to share knowledge among all countries within and outside the UNFCCC frameworks.

Capacity development efforts in coastal and island communities in 183 coastal countries and SIDS which are at the frontline of climate change should:
5.1 Provide technical and financial assistance to build capacity to develop and implement mitigation and adaptation measures to address climate change at the individual, institutional, and systemic levels

Action around ocean and climate capacity development should be framed along the following strategic goals:

--Develop capacity for coastal and marine adaptation (e.g., mainstreaming climate change adaptation into integrated coastal area management/planning, disaster preparedness, land-use planning, environmental conservation, and national plans for sustainable development), mitigation (e.g., management of carbon sinks), scientific research and observing systems, and public education and outreach, and establish indicators within UNFCCC review processes to assess progress in capacity development in these areas

--Integrate the ocean and climate perspectives in the implementation of the UNFCCC capacity development and technology transfer frameworks for developing countries and economies in transition through a consolidated framework of action (as illustrated by IOC Criteria and Guidelines on the Transfer of Marine Technology, which effectively cover both pure technology transfers and activities that would traditionally fall under capacity development, such as technical training and the sharing of knowledge)

--Within the SAMOA Pathway and other frameworks, reinforce existing adaptive capacity, including traditional knowledge, technologies, and skills in Small Island Developing States with the requisite balance of knowledge, tools, public support, scientific and political expertise, needed to implement mitigation and adaptation measures

--Promote the enhancement of marine policy centers in developing countries and SIDS to build capacity in management and policy related to oceans and climate

5.2 Strengthen the advancement of global marine observations, research, and related capacity development within the UNFCCC processes and beyond:

--Encourage the active participation of marine scientists and existing marine observation networks in the preparation of the Global Observing System for Climate (GCOS) implementation plan, envisaged to be presented and discussed at the UNFCCC COP 22

--Support the creation of the IPCC report on Oceans--this report would integrate and update the assessment of AR5 using scientific findings on the central role of oceans and climate and likely scenarios and consequences, as well as help to prepare and set the stage for AR6

--Support observation and science programs to fill the existing data gaps, in particular international collaborations such as the Argo network of oceanographic floats, which illustrate how international cooperation can rapidly improve our understanding of the physical behavior of the ocean providing important insight into its long-term subsurface variability

--Sustained ocean observation should be included as part of national commitments, particularly within the framework of UNFCCC and Agenda 2030/ SDG 14, in response to the call to increase knowledge to manage marine ecosystems sustainably, and understand the impacts of climate change and ocean acidification
--Enhance technical capacity development of vulnerable countries through the establishment of regional oceanographic centers to increase cooperation amongst States on ocean-climate research and multi-disciplinary observation (in accordance with SAMOA Pathways decision 58.f)

--Support actions implemented by the Global Ocean Acidification Network (GOA-ON) to facilitate cooperation and coordination between ongoing and planned ocean acidification observing programs and to deliver the results to enable scientists and policy-makers to develop the best adaptation and mitigation strategies

5.3 Expand public outreach and education efforts to enhance individual capacity and public understanding of the ocean’s role in planetary survival and in global and national well-being, of the risks posed to SIDS and coastal communities by climate change, and to catalyze support for mitigation and adaptation responses, echoing the call on education and awareness-raising made by the Lima Declaration on Education and Awareness-raising (COP 20, 2014)

--Encourage formal and informal education and public awareness programs to prepare societies for the impacts of climate change and to promote climate-resilient sustainable development, and include all stakeholders, including children, youth, the elderly, women, persons with disabilities, indigenous and local communities and non-governmental organizations in the implementation of these programs (Lima Ministerial Declaration)

--Encourage UNFCCC Parties to participate in intergovernmental panels and expert groups under the United Nations on matters related to climate change education, natural science, and public awareness, with an emphasis on oceans, coasts, and SIDS (Lima Ministerial Declaration)

5.4 Improve awareness and understanding among policymakers, especially at the UNFCCC and in other high-level decision making bodies, of the importance of oceans and climate issues and the need to take bold policy measures in the next five years to enhance the well-being of oceans ecosystems for planetary survival and human well-being.

--Strengthen the overall visibility of ocean-based capacity development issues and solutions within the climate debate and in the post-COP 21 climate regime through UNFCCC processes

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