

Outline of the Draft Report

Ocean-based Climate Actions of the NEAMPAN Sites in the Republic of Korea

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Climate crisis has driven global society to proactively take actions since 1990s in the field of GHG emission reduction, mitigation and adaptation. Societal recognition on the crisis has been incorporated into policies of public sector, as well as the management strategies of private sectors including business groups. The climate crisis came with biodiversity crisis such as habitats loss and species extinction. We have been living in an era of “twin crisis”, emphasizing the need to address both crises through an integrated rather than sectoral approach.

It is not surprising that twin crisis-related policies and investment have focused on terrestrial areas, with less emphasis on the substantial role of the ocean in mitigating climate-driven impacts. Therefore, it is very meaningful and timely to deal with ocean-based climate action to tackle the twin crisis, especially considering significant contribution of marine natural assets and their ecological and biological processes. Marine Protected Areas (MPAs), the representative common assets governed by institutional mechanisms at global, national, and local levels, have the potential to substantially contribute to mitigating impacts of climate change.

It is notable that practical outcomes could be achieved through the integration and harmonization of top-down and bottom-up actions. In terms of actual and useful solution development at a regional level, it would be useful to assess national actions and apply them in site-specific manner. In line with the above, the outline of the draft report will cover the following five major topics:

- ✓ scientific findings and regime at global level on the ocean-based climate actions
- ✓ scientific findings in the East Asia Region on the above matter
- ✓ ROK’s ocean-based actions at national level
- ✓ In-depth analysis of MPAs of ROK, and
- ✓ Policy recommendations for strengthening ocean-based climate action.

Details on each topic are as follows.

Scientific findings and regime at a global level

The section will include recent scientific findings on academic papers published through peer review, as well as reports from public entities such as IPCC, IPBES and WWF. Interpretation of these findings will focus on the climate and biodiversity crises in ocean and coastal areas. Additionally, the section might describe climate change and biodiversity related issues at a global level. Regional or site-specific findings might be used as references to support and underpin overall description on the twin crisis. Keywords network analysis, if possible, could be conducted to identify the

relationships and dynamics between two crises.

The second point in this section will describe legal and institutional mechanisms to deal with the twin crisis, including hard-laws, soft laws and their related derives: policies and resolutions of legally binding conventions and bodies such as UNFCCC and CBD; International agreements such as SDGs, Paris Agreement, along with collaborative activities such as joint survey, researches, monitoring, and assessment at a global level. In addition, the Google trends analysis could be included to capture the public perception of global societies regarding the key words related the twin crisis.

Scientific findings in East Asian Region

The section will garner the best available data and information including publications without peer review, to understand relationship between two crises. The interpretation of the regional findings in the context of global findings, is expected to help understand overall relationship between two issues, and their implications for better actions. However, it is challenging to indicate how many findings have been published on the two issues of climate change and biodiversity in ocean and coastal areas in East Asian Region.

ROK's ocean-based actions at national level

Republic of Korea is one of leading countries addressing climate change and biodiversity issues in both marine and terrestrial areas. The government has enacted various laws to ensure net-zero/negative and biodiversity conservation, e.g. National Framework Act on Climate Change and Green Growth, the Natural Environment Conservation Act, the Marine Environment Conservation Act, the Marine Ecosystem Conservation Act, the Wetlands Conservation Act, the Biodiversity Conservation Act, and so on. This section will provide a brief introduction to a legal system related to the twin crisis, and a detailed description of the legal mechanism specifically for ocean and coastal areas.

This section will also discuss National Strategies and Action Plans on ocean-based climate actions, with a focus on meaningful actions aligned with these strategies and plans. Since marine ecosystem conservation and restoration are crucial components of ocean-based actions, the section will extensively address recent challenges on biodiversity conservation, such as a blue carbon initiative, marine ecosystem axis establishment, World Heritage designation, an the like.

In-depth analysis of MPAs of ROK

The Korean government has been designating MPAs in marine and coastal areas since the late 1990s. Some MPAs are designated in coastal areas based on a legal mechanism under Ministry of Environment (ME). The establishment of Ministry of Oceans and Fisheries (MOF) in 1996 provided a firm platform for marine biodiversity conservation in Korea, leading to the rapid expansion of MPAs. Currently there are over 400 PAs in marine and coastal areas (CMPAs) in South Korea.

The PAs of RO Korea are designated and managed by several ministries of MOF, ME, MoLIT (Ministry of Land, Infrastructure and Transport), MoCST (Ministry of Culture, Sports and Tourism) and local governments. MOF, as a leading body in terms of MPAs, is governing several types of PAs in their jurisdiction. Wetlands Protected Areas in coastal waters, as the very representative PA, have drawn keen attention from public and as well international bodies of RAMSAR Convention Secretariat, UNESCO and EAAFP. Accordingly, some coastal wetlands are also designated as UNESCO World Natural Heritage and RAMSAR sites, in addition to being NEAMPAN sites.

This section will describe generic features and site-specific management plans for major MPAs including NEAMPAN sites. The analysis will focus on actions explicitly and implicitly pertinent to ‘ocean-based climate actions’. Some MPA management plans might overlook actions to deal with climate change issue, despite recognizing that comprehensive approach to climate change and biodiversity issues is an emerging discourse in Korea and East Asian region. Coherency of each MPA with ocean-based climate action will be evaluated by using ‘non-parametrical rating’.

Good practices to tackle the twin crisis at a local level also will be described, which can help to bring lessons for better actions in the future. In addition, contextual interpretation by linking national policies and institutional systems will be conducted to better understand strengths/opportunities/weakness/threats surrounding MPAs management, and to explore implications for improving the management plans. The lessons and implication from in-depth analysis will contribute to deriving recommendations for more strongly incorporating ‘ocean-based climate actions’ into MPAs management system of Korea and NEAMPAN sites in the future.

Policy recommendations for strengthening ocean-based climate action

The previous sections have provided information on recent efforts and practices to address climate change and biodiversity loss in marine and coastal areas, at global, regional, national and local levels. Legal and institutional mechanism, along with the examples or model cases at a practical level can contribute to improving management systems of MPAs in terms of addressing climate change and biodiversity loss in coastal and marine areas. This section will present recommendations for encouraging and elaborating ocean-based climate action within MPAs management system at national and site-specific levels. The recommendations are expected to be applied to MPAs system of this region.

<Annex> Work Flowchart

