Dear Sir or Madam:

This is Nianzhi Jiao from China. On behalf of PICES-ICES Joint Working Group on Ocean Negative Carbon Emissions (ONCE), which emphasizes on the commitment to science and innovation for developing and evaluating ocean-based negative emissions to provide concrete solutions for SDG 14. In this sense, we are calling to raise awareness of the great potential of oceans and hope that the political declaration could be more explicit on stating that ocean is the solution to climate change and to the sustainability of human society. To be more specific, I would like to make suggestions below:

1. In terms of Paragraph 1 of the statement, which communicates the awareness of government representatives of the critical situation facing the ocean and the need for scientifically based innovative solutions. We have one point to add. The description of ocean-based scientific and innovative solutions needs to be more explicit here. We propose to consider the immediate needs for coordinating international effort for developing innovative research platforms to accelerate the implementation of ocean actions with comprehensive risk management.

2. In Paragraph 3, we suggest adding an explicit statement that “ocean is a promising solution to climate change”, more than stating that the ocean act as ‘a sink or reservoir’. The reason for that is first scientific evidence shows that the ocean absorbs about 30% of the carbon dioxide, and from the historical perspective, the partitioning of carbon between the atmosphere and ocean was able to shift the earth climate between glacial and interglacial periods; also ocean is a source of clean energies, like tidal energy, wind energy, etc. No matter in terms of the way it operates in the atmospheric system or as an alternative to clean energy, the ocean can provide solutions in both regards. In this instance, we propose to include a statement in Paragraph 3 about the importance of ocean-based solution to climate change.

3. In Paragraph 5, after the statement of ‘recognize the importance of protecting, conserving, and restoring nature and ecosystems’, we recommend adding the statement “coordinating science-based actions.” We suggest reiterating science-based action for “protecting, conserving, and restoring” because conventional restoration actions like reforestation is insufficient to have timely effect, and the evidence suggests negative carbon emission approaches based on science and innovation offer opportunities to restore ecosystems along with enhancement of ocean carbon sink. And we suggest replacing “including acting as sinks and reservoirs of greenhouse gases...” with “confronting climate change”.

For example, as coastal areas play as interface between land and ocean, nutrients run off from the land leading to eutrophication of coastal ocean. Therefore, the corresponding management approach requires a broader focus on land-ocean integrated management. Thus, scientific research is needed to come up with bottom-up solutions. Restoring ecosystems to confront climate change requires timely actions based on research plans and related scientific studies.
7. As for Paragraph 7, it is about marine litter and ocean governance, and we think it would be more clearly by calling for innovative use of ocean for the purpose of bettering human society, such as how to prevent COVID-19-like epidemics in the future, etc. It is also worth noting that scientific findings show that ocean can play as geological barrier for epidemic, so the innovative use of the oceans can achieve the purpose of pandemic prevention by encouraging the exploration of ocean sciences.

11. When it comes to Paragraph 11, which recognized a series of high priority areas for intervention, we would like to add several points.

First, in the general statement of paragraph 11, we propose to express the ocean's impact on climate change. 11(a) emphasizes “anticipating the impacts of planned activities and eliminating or minimizing negative effects” caused by human. But it does not specify the means to mitigate adverse effects. We suggest adding more concrete suggestions including coordinating global effort on monitoring and information sharing for controlling pollution and plastic/PPE products into the ocean. Therefore, we believe that the declaration can do more work on pointing out that the basis for the realization of all objectives should be based on science as one primary consideration. 11(e) We suggest adding science-based eco-engineering approaches within the marine protected areas with fully monitoring. 11(f) We propose that the terminology of “nature-based” be changed into “ocean-based” which would offer more concentration and clarity in terms of emphasising the role ocean plays in mitigation of climate change.

After all, we would like to suggest that the UN Ocean Conference could take into consideration of ocean negative carbon emissions (ONCE) within the sessions, which is an illustration of innovative use of ocean, but also lack for international governance. It is closely related to the SDGs, and would incorporate eco-engineering approaches, ocean-based clean energy, marine aquaculture, and restoration of polluted ocean areas.