Statement on Korea’s Pollution Prevention Activities in the Arctic

By Ambassador Kim Young Jun

Introduction

First of all, I would like to convey my sincere appreciation to the Finnish Chairmanship for its initiative to organize this Observers special session as a regular program of the Arctic Council SAO meeting for the first time. This engagement for the observers could be regarded as a big progress in the discussion process of the Arctic Council. As we are well aware, Arctic issues are already “emerged global issues” which are needed to be addressed by the Arctic and the non-Arctic countries together. In this regard, the Observer States also share a sense of responsibility on the Arctic with the Arctic States and we will do our best to make a meaningful contribution in addressing the challenges we are facing in the Arctic.

Scientific research makes up the most significant portion of the Arctic endeavor of the Republic of Korea. Korean scientists are making constant efforts to better understand pollution issues through their research. Korea is participating in all WGs of the Arctic Council and tries to make a meaningful contribution to the activities of the WGs. I could not explain all the activities of the Korean scientists. But today, I would like to briefly introduce Korean scientists' monitoring activities for pollutants in the Arctic and the submission of the voluntary national report on black carbon and methane, which could contribute to the prevention of pollutants in the Arctic environment, in both medium and long term perspectives.

Black Carbon Monitoring Activities

Black carbon is a fine particulate matter generated by human activities including particles released from combustion engines in automobiles, industrialized facilities, and heating equipment. Every year, the Korea Polar Research Institute (KOPRI) monitors black carbon concentration in the atmosphere along the Arctic research sailing route, using a black carbon

aethalometer installed on the IBRV *Araon*. Since 2013, KOPRI has also been monitoring black carbon pollution at an in-land observation site at Cambridge Bay, Canada.

A research team from the KOPRI had monitored organic and inorganic pollutants such as mercury from 2015 to 2017, mainly in Kongsfjorden, a part of the Svalbard Archipelago in Norway. By examining the behavior of contaminants in the ice atmolecular level, we have discovered the natural detoxification process associated with ice chemistry.

These monitoring activities in the Arctic can ultimately contribute to addressing pollution issues in the Arctic, by providing data on pollutants and identifying the mechanism of pollutant generation. I would like to express my sincere gratitude to the partner countries including Canada and Norway for their close cooperation in carrying out this joint research program. I hope that the pollutant monitoring activities by Korean researchers will constitute a meaningful contribution to the Arctic Council's working groups, especially the activities of the Arctic Monitoring Assessment Program (AMAP) working group.

Report on Black Carbon and Methane

In addition, Korea has contributed to the EGBCM (Expert Group on Black Carbon and Methane) as well. Korea voluntarily submitted the national report on black carbon and methane in November 2015. Since then, Korea's National Institute of Environmental Research (NIER) has participated in the EGBCM meetings. Among the five working groups based on the sources of emissions, Korea took part in the working group on mobile sources, and provided expertise and input focusing on diesel. Worth noting is the fact that Korea's pay-as-you-throw policy designed to reduce waste in households was recognized as one of the innovative practices and included in the paper of the working group on solid waste disposal. Currently Korea plans to submit updated data on black carbon emissions to the Arctic Council Secretariat and the technical report team by the end of this year.

Thank you for your attention. (End)