



2022 United Nations Ocean Conference Side Event

Marine Debris Monitoring and Assessment: Recommendation for Monitoring Debris Trend in Marine Environment

Organized by: Secretariat of the National Coordination Team for Marine Debris Handling of Indonesia and Coordinating Ministry for Maritime Affairs and Investment of Indonesia

Background on the event (one paragraph)

Improvement of marine debris monitoring is urgently needed to enhance the quality and accuracy of the marine debris issue magnitude in our environment. Academia, research institutes, and governments have employed marine debris monitoring initiatives, with varied challenges, success stories, and lesson learned. These cases need to be shared and learned with each other to produce a robust marine debris monitoring framework and assessment. This side event, conducted on 29 June 2020, aimed to serve as a platform for relevant stakeholders to share and exchange knowledge and best practices on marine debris monitoring, and ultimately, mobilize partnerships with wider society and other relevant stakeholders to monitor the problem of marine plastic debris more effectively. This side event featured Nani Hendiarti (Deputy Minister for Environment and Forestry Coordination, Coordinating Ministry for Maritime Affairs and Investment), Burkhard Hinz (Head of Urban Development and Mobility, KfW), Muhammad Reza Cordova (Researcher, National Research and Innovation Agency of Indonesia), Prof. Richard Thompson (Director of the Marine Institute, University of Plymouth), Mattis Wolf (Researcher, Marine Perception Research Group, German Research Centre for Artificial Intelligence), and Mana Kamakura (Section Chief, Office of Policies against Marine Plastics Pollution, Ministry of the Environment, Japan).

Key Issues discussed (5- 8 bullet points)

- Waste management data are still insufficient
- Inter-institutional data are not connected nor synchronous to each other
- Waste data are mostly from land-based data, lack of data on sea-based activity
- Research data is not disclosed unless it has been published

- Difficulties in comparing and synthesizing data on marine debris monitoring due to the diverse monitoring methods

Key recommendations for action (5 - 6 bullet points)

- Research on marine plastic debris monitoring must take a multidisciplinary approach and must be strengthened by international and local research partnerships.
- Harmonization of monitoring methods is needed by creating guidelines that consist of monitoring target, technical parameters identification, and minimum requirements and specific needs of the monitoring.
- To formulate effective monitoring, among important considerations are evidence of harm from marine debris, must be related to an intervention, and the method must be feasible, affordable, and replicable. Other than those, marine debris monitoring must come from existing long term data set, can be conducted in specific and short term or long and holistic term, and is accessible to all nations.
- Digital innovations can support tackling plastic waste problem by providing real world data for the plastic waste situation, plastic waste models validation, sources identification, and policies effectiveness measurement.
- Among digital innovation on marine debris monitoring, there can be a monitoring method that is a combination of local remote sensing, satellite-based information and field surveys to paint a holistic picture of the plastic waste situation and provide actionable information.