

United Nations Environment Programme

NOWPAP



Northwest Pacific Action Plan



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NOWPAP-TEMM Joint
Workshop on Marine
Litter Management

24-25 September 2019

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2019 NOWPAP-TEMM Joint Workshop on Marine Litter Management

Dalian, People's Republic of China

24-25 September 2019

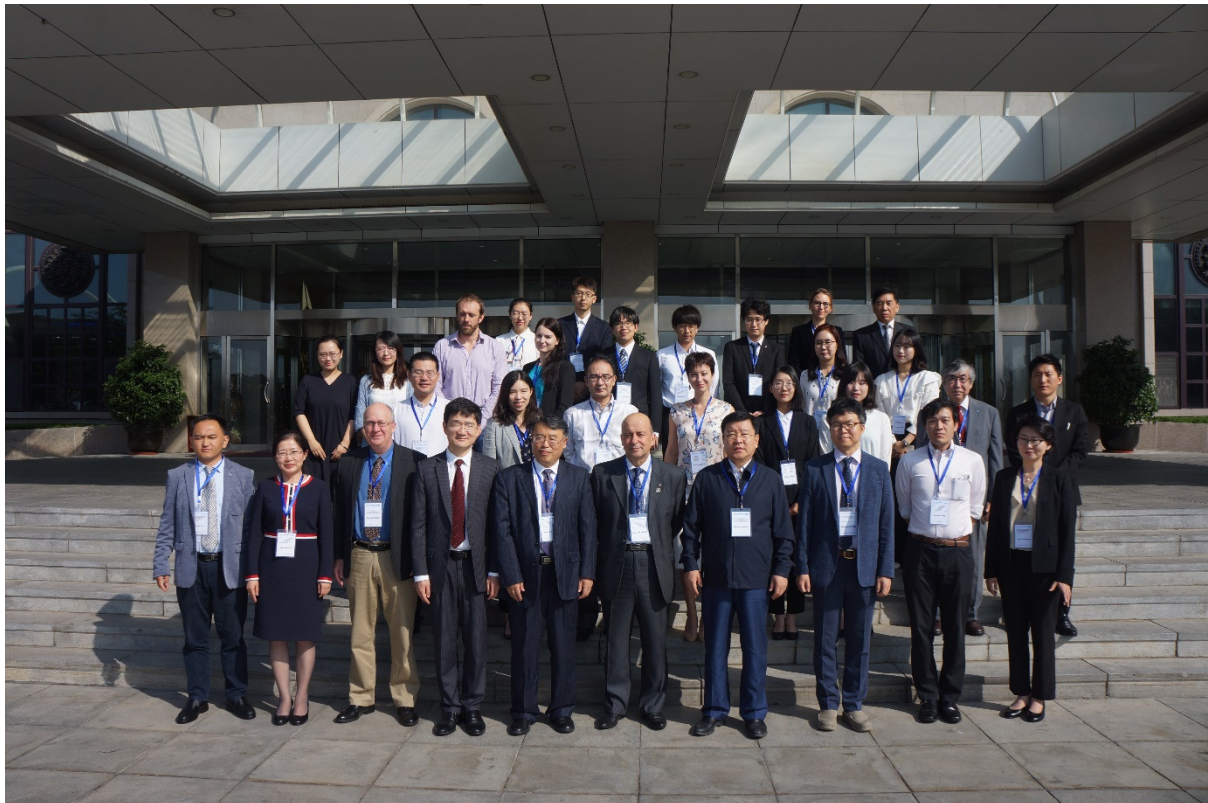
**Summary of the 2019 NOWPAP-TEMM Joint Workshop on Marine Litter
Management and 2019 NOWPAP International Coastal Cleanup Campaign**

**Regional
Seas**

**NOWPAP-TEMM Joint Workshop on Marine Litter Management and 2019
NOWPAP International Coastal Cleanup Campaign**

24-25 September 2019

Dalian, People's Republic of China



Organized by:

Ministry of Ecology and Environment of China

NOWPAP Regional Coordinating Unit (RCU)

Co-organized by:

Chinese Research Academy of Environmental Sciences

Dalian Ecology and Environment Bureau

National Marine Environmental Monitoring Center of China

Supported by:

Dalian Metropolitan Government

Opening Ceremony

1. The Northwest Pacific Action Plan (NOWPAP) - the Tripartite Environment Ministers Meeting among China, Japan, and Korea (TEMM) Joint Workshop on Marine Litter Management was held in Dalian International Finance Conference Center, Dalian, China on 24-25 September 2019. Dr. Xiangbin PEI, Director of the Department of Marine Ecological Environment, Ministry of Ecology and Environment, China, Mr. Haibing ZHANG, Deputy Secretary General of Dalian Metropolitan Government, Director of Dalian Ecology and Environment Bureau of China, and Dr. Ning LIU, Programme Officer of NOWPAP RCU, gave opening addresses and welcomed the participants.

Session 1: Progress on Marine Litter Management in the NOWPAP region (policy changes, updated statistics, investment, new approaches)

2. Session 1 was chaired by Dr. Ruizhi LIU, Director of State Environmental Protection Key Laboratory of Estuarine and Coastal Environment, Chinese Research Academy of Environmental Sciences. As China's focal point on marine litter, Dr. Ruizhi LIU presented "*Progress in addressing marine litter in China*". He reported China's marine litter data were collected in 57 monitoring areas in 2018. He also introduced the efforts put by the Chinese Government against marine litter, such as the comprehensive governance in Bohai, the Zero-Waste City initiative, a plastic ban in Hainan Province and the waste sorting in Shanghai.
3. Mr. Tatsuya ABE, Deputy Director, Office of Marine Environment, Water Environment Division, Environmental Management Bureau, Ministry of the Environment, Japan, delivered his presentation on "*Progress in addressing marine litter in Japan*". He outlined the results of the G20 Osaka Summit in June 2019 which had included the Osaka Blue Ocean Vision, the G20 Implementation Framework for Actions on Marine Plastic Litter, and the G20 Resource Efficiency dialogue. He also introduced the National Action Plan for Marine Plastic Litter in Japan, which focused on the prevention of plastic litter outflow into the ocean. As for the local governments, subsidized projects for cleaning up the Japanese coasts had been established, with a budget of approximately 28 million US dollars in 2017. Through these subsidies, the cooperation between the Ministry of Environment, the Fisheries Agency, the local governments and fishermen have been enabled. He also emphasized the importance of understanding the actual state of microplastics. In addition, he briefed the "The Guidelines for Harmonizing Ocean Surface Microplastic Monitoring Methods" published by the Ministry of Environment of Japan.
4. Mr. JuYoung PARK, International Affairs Specialist, Korea Marine Environment Corporation, presented "*Progress in addressing marine litter in the Republic of Korea*". He introduced the situation with marine litter in the Republic of Korea, stating that 145,258 tons of marine litter was generated annually in ROK, of which 65% are land based, and 35% are sea-based. The amount of existing marine litter was reported to be 148,721 tons. He also briefed the meeting about the National

Marine Litter Monitoring Program and showed the results of monitoring and status of marine litter removal. He highlighted that the annual marine litter removal rate during the period of 2012-2018 was approximately 78,022 tons, with an overall cost of approximately 46 million US dollars, including the contributions from local governments. Combat Projects for Marine Litter in ROK were reviewed, including the 1st (2009-2013) and 2nd (2014-2018) National Marine Litter Management Plans which covered 28 and 21 tasks respectively. For the period of 2019-2023, the 3rd National Marine Litter Management Plan aimed to strengthen the management of marine debris at each stage and switch to a scientific and prevention-oriented management plan.

5. Dr. Daria ZADOYA from the Department of Oil and Gas Industry Safety Maritime State University named after admiral G.I. Nevelskoy presented "*Progress in addressing marine litter in the Russian Far East.*" She briefly introduced the sources of marine litter and highlighted that dump, as a land-based source, led to a major concern. She emphasized that current waste separation and collection systems needed to be improved, as the capacity of the polygon would be exceeded in the near future. A new waste management system is urgently required and is expected to reach up to 60% utilization and recycle rate. She also summarized the current obstacles of waste management in the Russian Far East, including the inconvenience of transportation, the lagged management standards, and the lack of waste recycling companies.
6. In the end of the session, a roundtable discussion focused on gaps and challenges, data collection and information sharing, and engaging NGOs and private sectors to address marine litter. Dr. Ruizhi LIU introduced that Rendu Ocean, a Chinese NGO, had organized a number of cleanup campaigns. Chinese local governments had attached more importance to beach cleanup and waste sorting. Around Bohai Sea, thirteen cities had established coastal cleanup mechanisms.
7. Mr. ABE stated that though NGOs activities were very important, but insufficient due to the constraints of human and finance resources. It was important to work with private sector. The Ministry of Environment of Japan, in cooperation with Nippon Foundation, had organized a marine waste week in March 2019. More than 400,000 people joined this campaign.
8. Mr. JuYoung PARK introduced that KOEM had signed an MOU with Lotte to support cleanup activities and education program. Dr. Sunwook Hong from Our Sea of East Asia Network (OSEAN) introduced that some companies such as Nike approached OSEAN to organize coastal cleanup campaigns.
9. Dr. Sergey Monients from Russia introduced that schools in Vladivostok had organized voluntary activities to clean beach.
10. Dr. Hong from OSEAN noted that in Dr. Ruizhi Liu presentation, 27 monitoring sites were introduced, but there were no data on NGOs efforts. Dr. Ruizhi Liu responded that the results were from national reports. The major monitoring work had been done by the national Marine Environmental Monitoring Center. The reports did not include NGO's work. NGOs' monitoring work concentrates on beach, not in water. Dr. Hong suggested that NGOs like RENDU, Blue Ribbon

Ocean Conservation Association (Broca) collected good data. Researchers in China should be interested in their information.

11. Mr. Keith Alverson from UNEP International Environmental Technology Center (IETC) commented that there was a need to link operational monitoring work with actions to address marine litter. Can the baseline be showed? There is a need to show actions matter.
12. Dr. Xiangbing Pei from China said that RCU should provide a framework including categories such as policy, monitoring data, information from civil science. Dr. Hong said that she agreed with Dr. PEI's proposal. RCU should provide a simple format to collect information to make data comparable, at least among China, Japan and Korea.
13. Mr. Jinhua Zhang from UNEP commented that taking back approach was very interesting. NOWPAP member states should think how to work with big companies to reduce plastic package.
14. Ms. Natalie Harms from the Coordinating Body on the Seas of East Asia (COBSEA), UNEP, commented that there was a need to think of comparable data and harmonized data sharing. NOWPAP hosts a regional node on marine litter, which provided a good platform for data sharing. The participants should consider cross-regional data sharing.
15. Mr. Nikolai Kozlovskii from Russia commented that since 2006, there were protocols, such as beach data. The problem is in the absence of feedback. Data had been shared with Ocean Conservation and the Regional Node, but it was not easy to find regional scale data, despite similar data sheet.

Session 2: Improve Waste Management to Reduce Waste Leakage into the Marine Environment

16. Session 2 was chaired by Mr. Keith Alverson from UNEP IETC. Dr. Qingjia MENG from the Chinese Research Academy of Environmental Sciences delivered his presentation on "*Improving waste management to address marine litter in China*". He reviewed the current status of waste generated in China, by categorizing it into three types, namely the industrial solid waste, the domestic waste, and the hazardous waste. He noted that by the end of 2018, the daily national urban domestic waste disposal capacity exceeded 700,000 tons, among which approximately 98% went through harmless treatments. He also introduced the waste management in China covering a variety of aspects, including that China issued technical specification for waste plastics recycling in 2019; technical specification for plastics waste recycling and sorting in 2016; and ship pollutants emission standard in 2018. In April 2012, the State Council issued the "12th Five-Year Plan for the Construction of Harmless Treatment Facilities for Urban Domestic Wastes". On 21 January 2019, the State Council issued the workplan on the Zero-Waste City Pilot Program in China which promotes the reduction, recycling and the environmentally sound disposal of waste. By the end of 2020, 46 major cities must complete their waste sorting and processing system. Before

2025, prefectural-level cities are expected to complete the domestic waste classification and treatment system.

17. Mr. Tatsuya ABE from the Office of Marine Environment, Water Environment Division, Environmental Management Bureau, under the Ministry of the Environment of Japan presented the “*Improving waste management to address marine litter in Japan*”. He reviewed the legislative framework of Japan’s Fundamental Environmental Law, the Sound Material-Cycle Society and Hierarchy Concept, and the 4th Fundamental Plan for Establishing a Sound Material-Cycle Society. He gave detailed explanation about the planned measures aiming at establishing “Regional Circular and Ecological Spheres”. He emphasized that the resource circulation strategy for plastics “does not only solve worldwide resource and environmental issues, including the Asia-Pacific Region, but also realize economic growth and employment creation and contribute to sustainable development.”
18. Dr. Sora YI, Head of Division of Living Environment Research Korea Environment Institute (KEI)’s presentation on “*Improving waste management to address marine litter in the Republic of Korea*” consisted of three sections, which were the issues and impacts of plastic waste in the ocean, waste management and regulations to reduce plastic waste generation, and waste management to reduce waste leakage into the marine environment. She highlighted the negative impacts of marine debris on marine creatures, given that 100% of sea turtles, 54% of marine mammals, and 56% of seabirds were estimated to be adversely affected. She emphasized the importance of a comprehensive plan for marine plastic reduction in Korea, which aimed to reduce plastic marine litter by 30% by 2022 and 50% by 2030 compared to 2018.
19. Dr. Sergey MONINETS, Dean of the Department of ecological safety and shelf development Maritime State University named after admiral G.I. Nevelskoy, delivered a presentation on “improving waste management to address marine litter in the Russian Federation”. He focused on the National Projects till 2024, where 61 billion USD budget had been distributed to the National Project “Ecology”. This project covers a wide range of aspects, 5 of which were related to waste management and the wellbeing of water bodies. The National Project “Ecology” aimed to form an integrated system for waste management and restore the lands where unauthorized landfills had taken place. 191 of such dump areas were expected to be restored by the end of 2024. He also mentioned that 23,500 hectares of water bodies and 9,000 km of the coastlines were aimed to be cleared till 2024, which involved the participation of approximately 4.5 million people.
20. In the end of Session 2, a roundtable discussion was organized focusing on challenges in waste management including waste sorting, collection, and disposal; countermeasures, public participation, role of governments, private sectors; and enforcing regulations.
21. Mr. Keith Alverson stated that his viewpoint was that the first challenge was a growing large number of tourists and informal hotels; The second was organic wastes. Another one was to reduce use of plastic. Some cultures believe plastic is good.

22. Dr. Sora Yi commented that Korean government had implemented a number of policies to reduce plastic waste. But in Korea, it is easy to get food delivered, also by a phone call. Those restaurants try to use single use plastic. For government, it is difficult to manage this. So single use package for food delivery is a challenge.
23. Mr. Nikolai Kozlovskii commented that it was important to deal with opening burning waste issue.
24. Dr. Xiangbing PEI stated that one of the challenges was related to infrastructure, as there was a need for more investment on waste separation facilities.
25. Ms. Natalie Harms commented that challenges also included cross-border movement of plastic waste, recycling business, illegal document, E-commerce, lack of standards, and packaging. Moreover, with account of the role of informal waste sector, workforce base, urban poor, who relied on waste sorting. They make environmental contribution, but how to protect their neighborhood? She further highlighted the importance of bioplastics which could lead to a reduction of plastic waste.
26. Ms. Xinzhen Lin from China commented that packaging was one of the big challenges. How one can change consumers' behavior and reduce the time of online shopping? Furthermore, although 46 cities had mandated waste sorting, after sorting, how to deal with the waste? Waste sorting in countryside was another challenge.
27. Dr. Ruizhi Liu stated that China had launched the zero-waste city initiative, establishing green fishing, green shipping mechanisms. China would further fight against white pollution, such as food containers.
28. Dr. Xiangbing Pei stated that plastic play an important role in people's life. Alternative material, such as biodegradable plastic should be promoted. Innovation is the solution.
29. Dr. Yi commented that high consumption of plastic was in place in Korea. The government planned to ban plastic in coffee shops. Korea tried to reduce 50% of plastic consumption by 2030.
30. Mr. Keith Alverson suggested to link all the good actions with monitoring activities. Which actions are useful? Which reduces leakage? One big source is clothing.
31. Dr. Sunwook Hong highlighted monitoring actions. In a 2-year monitoring programme, OSEAN saw fishing gears and buoys had been most abundant, The Korean government regulated the replacement of buoys to durable ones, which led to the great decreasing of littered buoys. OSEAN observed that among top 10 items, 5 were from the sea. The Ministry of Environment should be engaged more in this regard.
32. Mr. Keith Alverson inquired the participants that whether there was a good example to work with private sector to use alternatives to reduce consumption.
33. Mr. Abe said that packaging was a big challenge for shops. The Ministry of Environment of Japan had organized stakeholder meetings, engaging NGOs and

local governments, to find new measurements.

34. Mr. Keith Alverson introduced that Unico had discussed with UNEP measures to reduce plastic. Unico has millions of consumers. They announced to stop providing plastic bags. New recyclable and sustainable fabric have been also discussed.
35. Mr. Keith Alverson inquired whether there had been any lesson learnt on the enforcement of regulations.
36. Dr. Qingja Meng responded that after the government sets a regulation, it needed to explain how to do it right.
37. Dr. Xiangbing Pei said that education was important. What is wet litter? What is dry litter? There is a need to supervise the implementation of regulations.
38. Dr. Yi from Korea explained that officers in Korea monitored waste collection and illegal waste dump, if a resident did not sort his or her waste properly, the waste collector would not collect the waste. CCTV would help to identify the person, who broke the rules. In Korea, apartment managers always check the waste separation. Neighbors give pressures to those, who do not obey rules.
39. Mr. Keith Alverson gave an example in Japan, if the waste is not separate properly, a letter with photos will be sent to all the residents by the building management to teach people how to follow the rules. Moreover, the governmental policy should be carefully developed in order to avoid pushing people to dump waste illegally.

Session 3: Further Enhance Regional Cooperation in Addressing Marine Litter

40. The session 3 was chaired by Dr. Ning LIU. He reported about the “*UN Environment response to marine litter: Progress since the last NOWPAP-TEMM Workshop in 2018*”, which included updates on regional and global processes. He provided an overview on the UNEA Resolutions on Marine Litter and Microplastics, as well as the Regional Action Plans on Marine Litter. He focused on the importance of scientific and technological support, as well as management and coordination to the success of these action plans. He also gave information on the online course and training sessions for addressing marine litter. The online courses will last two weeks in all UN languages and have received 22,000 registrations.
41. Mr. Keith ALVERSON gave a presentation on the “*Plastic Pollution and Solutions*”. He briefly introduced the vision of the International Environmental Technology Centre (IETC). He raised the question that whether banning and burning were really the solutions to the issue risen by plastic wastes and emphasized that monitoring was the only way to recognize the current situation. He illustrated the trends of primary plastic waste generation, the types of regulations on plastic bag bans and Styrofoam, and the impact of such regulations around the globe. He highlighted that after implementing national bans, 20% of the cases showed no to little impact. The main reasons are estimated to be the lack of enforcement, or the lack of alternatives to the consumers.

42. Ms. Natalie HARMS from the Secretariat of the Coordinating Body on the Seas of East Asia (COBSEA), United Nations Environment Programme Regional Office for Asia and the Pacific, delivered her presentation on "*Tackling Marine Litter in the East Asian Seas Region*". She gave a brief introduction of COBSEA and its ongoing marine litter activities. She explained purpose of the COBSEA the Strategic Directions 2018-2022, which is to "guide COBSEA participating countries and the COBSEA Secretariat in action towards development and protection of the marine environment and coastal areas of East Asian Seas, leveraging COBSEA as an intergovernmental policy mechanism towards planning, implementation and tracking of delivery of ocean-related Sustainable Development Goals, in line with the global Regional Seas Directions 2017-2020".
43. Ms. Wandu HUANG from the Trilateral Cooperation Secretariat made a presentation entitled "Promotion of Trilateral Environmental Cooperation and Roles of Trilateral Cooperation Secretariat". She summarized the history and development of the Trilateral Cooperation Secretariat (TCS), along with the TCS's involvement in the Sustainable Development Goals (SDGs) and related research and data development. The most recent program TCS has developed is the "2nd Trilateral Environmental Teacher's Exchange Program" held in August 2019 in Tokyo, Japan, which provided a forum to exchange challenges and practices and equipped skilled personnel to bring their educational mission back to their origin.
44. Mr. Jinhua ZHANG, Programme Officer of the United Nations Environment Programme Regional Office for Asia and the Pacific reported on the "Asian Regional Overview of Marine Litter and Marine Litter Hotspot Assessment Methodology". He started by introducing the UNEP Mandate: "to keep under review the state of the global environment..." and explained that the message on Ocean and Coasts focused on Coral Reefs, Fisheries and Aquaculture, Nutrition, and Marine Plastics. He emphasized that the methodology should be carried out step by step starting from the identification of marine litter hotspots, which is affected by various factors, such as population, disposal rate, generation rate, current, wind, maritime and fishery activities and others. He also recognized the achievement that can be made through Public-Private Partnership, by giving an example of the elimination of leaded petrol in 80 countries during the past 17 years.
45. The participants agreed to provide comments to the Regional review by late October 2019, to the hot-spots assessment by early 2020. Dr. Moninets agreed to provide the information of Russian far east to this regional overview.
46. Ms. Huang from TCS said that for future cooperation, they could work with NOWPAP like public campaigns or joint studies.
47. Ms. Xinzhen Lin from China advised to avoid overlapping on marine litter. Partners should coordinate their efforts.
48. Dr. Hong from OSEAN commented on how to activate regional cooperation. Last year, there was a NGO forum organized during the NOWPAP-TEMM Marine Litter Management Workshop in Busan, Korea. She wished that more chances would be provided to NGOs and invite them to NOWPAP events. OSEAN publishes English newsletters twice a year to facilitate information exchanges.

49. Mr. Keith Alverson stated that at UNEP, a lot of work were driven by the marine litter issue, and there were a lot of attention to marine problem. NOWPAP harnessed the interest by exploring ways to address marine litter in upstream. It's important to find solutions, not only focus on sources. Ocean Conservancy researched on coastal zone and found that plastic stay at coastal zone for a quite long time. Cleaning coastal zone is a very effective solution.

50. Mr. Jinhua Zhang from UNEP said that as a global strategy, UNEA promotes data sharing, like world environmental information sharing room. In a broader context, how to make NOWPAP platform to be part of the global platform? Not only for marine litter data, but for environment in general.

51. Ms. Natalie Harms commented that people identify good opportunities through peer learning. COBSEA and NOWPAP should continue their cooperation.

Closing

52. The workshop was closed at 12:00 on 25 September 2019.

The presentations of the 2019 NOWPAP-TEMM workshop are available at the following webpage:

2019 NOWPAP International Coastal Cleanup Campaign

25 September 2019, Dalian, R. Korea



Photo credit: Dalian Environmental Protection Volunteers Association, Fengxiang ZHANG

53. Mr. Zailin TANG, Vice President of the Dalian Environmental Protection Volunteers Association delivered an introduction presentation on the International Coastal Cleanup Campaign.

54. Coastal cleanup activities were conducted at the Bangchui Beach in Dalian City. Representatives of government agencies and research institutes from China, Japan, the Republic of Korea, the Russian Federation, as well as participants from the UN Environment Programme (UNEP), the Trilateral Cooperation Secretariat, and non-governmental organizations teamed up with volunteers from China to clean up the Bangchui Beach in Dalian, China, on 25 September 2019. More than 150 people joined this event and collected 76 kilograms of litter, which included 220 plastics items (weighing a total of 16.6 kilograms), 93 rubber items (26.6 kilograms), 17 metal items (8.5 kilograms) and 4 glass items (0.4 kilograms). Local media, Dalian Daily and Dalian Television Station present at the 2019 ICC and

Liaoning Daily, Chinese National Radio Website, Liaoning Provincial Government Website reported about the beach cleanup campaign to the local newspaper.

http://dlxww.com/news/content/2019-09/25/content_2338195.htm

http://epaper.lnd.com.cn/lrbepaper/pc/layout/201909/26/node_11.html

http://www.cnrnz.cn/xwzx/201909/t20190925_1363887.html

http://www.cfej.net/pgt/201910/t20191009_736771.shtml

ANNEX 1: Agenda of the meeting

**NOWPAP-TEMM Joint Workshop on Marine Litter Management
and
2019 NOWPAP International Coastal Cleanup (ICC)**

Dalian, the People's Republic of China, 24-25 September 2019

Tuesday, 24th September 2019: NOWPAP-TEMM Joint Workshop on Marine Litter Management

Venue: Conference Room 1, Dalian International Finance Conference Center

- Organizer:** Ministry of Ecology and Environment of China
NOWPAP Regional Coordinating Unit (RCU)
- Co-organizer:** Chinese Research Academy of Environmental Sciences
Dalian Ecology and Environment Bureau
National Marine Environmental Monitoring Center of China
- Supporter:** Dalian Metropolitan Government

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| 08.30 – 09.00 | Registration |
| 09.00 – 09.30 | Opening Ceremony |
| | <p>Dr. Xiangbin PEI, Director, Department of Marine Ecological Environment, Ministry of Ecological Environment, China</p> <p>Mr. Haibing Zhang, Deputy Secretary General of Dalian Metropolitan City Government, Director of Dalian Ecology and Environment Bureau, China</p> <p>Dr. Ning LIU, Programme Officer, NOWPAP Regional Coordinating Unit</p> <p>Group Photo</p> |

UNEP Northwest Pacific Action Plan (NOWPAP)

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| <p style="text-align: center;">Toyama office: 5-5 Ushijimashin-machi, Toyama 930-0856, Japan Tel. (81-76)-444-1611; Fax (81-76)-444-2780</p> | <p style="text-align: center;">Busan office: 152-1 Haean-ro, Gijang-up, Gijang-gun, Busan 619-705, Republic of Korea Tel. (82-51)-720-3000; Fax (82-51)-720-3009</p> |
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| <p>Session 1. Progress on Marine Litter Management in the NOWPAP Region</p> <p>(Speakers will present policy changes, updated statistics, investment, new approaches in preventing, monitoring and removing marine litter) Presentations of 20 mins followed by Q&A 10 mins</p> <p><u>Chair: Dr. Ruizhi LIU</u>, Chinese Research Academy of Environmental Sciences</p> | |
| 09:30 – 10:00 | <p><i>Progress in addressing marine litter in China</i></p> <p>Dr. Ruizhi LIU, State Environmental Protection Key Laboratory of Estuarine and Coastal Environment, Chinese Research Academy of Environmental Sciences</p> |
| 10:00 – 10:30 | <p><i>Progress in addressing marine litter in Japan</i></p> <p>Mr. Tatsuya ABE, Deputy Director, Office of Marine Environment, Water Environment Division, Environmental Management Bureau, Ministry of the Environment, Japan</p> |
| 10:30 – 10:50 | Coffee break |
| 10:50 – 11:20 | <p><i>Progress in addressing marine litter in the Republic of Korea</i></p> <p>Mr. Ju Young PARK, International Affairs Specialist, Korea Marine Environment Corporation</p> |
| 11:20 – 11:50 | <p><i>Progress in addressing marine litter in the Russian Far East</i></p> <p>Dr. Daria Zadoya., Associated professor of The Department of Oil and Gas Industry Safety Maritime State University named after admiral G.I. Nevelskoy</p> |
| 11:50 – 12:30 | <p>Roundtable discussion on challenges and countermeasures in addressing marine litter at national level</p> <p>The speakers in this session will be invited to the stage again and the discussion will focus on:</p> <ol style="list-style-type: none"> 1. Gaps and challenges; 2. Data collection and information sharing 3. Engaging NGOs and private sectors |
| 12:30 – 14:00 | Lunch break |
| <p>Session 2. Improve Waste Management to Reduce Waste Leakage into the Marine Environment (Speakers will present : 1. Legislation, regulations and action plan on waste management; 2. Use of fiscal and financial instruments to improve waste management; 3. Best practices and Lessons Learned) Presentations of 20 mins followed by Q&A 10 mins</p> <p><u>Chair: Mr. Keith Alverson</u>, Director, International Environmental Technology Centre, United Nations Environment Programme (TBC)</p> | |

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| 14:00 – 14:30 | <i>Improve waste management to address marine litter in China</i> Dr. Qingjia MENG, Chinese Research Academy of Environmental Sciences |
| 14:30 – 15:00 | <i>Improve waste management to address marine litter in Japan</i> Mr. Tatsuya ABE, Deputy Director, Office of Marine Environment, Water Environment Division, Environmental Management Bureau, Ministry of the Environment, Japan |
| 15:00 – 15:30 | <i>Improve waste management to address marine litter in the Republic of Korea</i> Dr. Sora YI, Head/Division of Living Environment Research Korea Environment Institute (KEI) |
| 15:30 – 15:50 | Coffee break |
| 15:50 – 16:20 | <i>Improve waste management to address marine litter in the Russian Federation</i> Dr. Sergey MONINETS, Dean of the Department of ecological safety and shelf development Maritime State University named after admiral G.I. Nevelskoy |
| 16:20 – 17:30 | The speakers in this session will be invited to the stage again and the discussion will focus on: <ol style="list-style-type: none"> 1. Challenges in waste management including waste sorting, collection, and disposal; 2. Countermeasures, public participation, role of governments, private sectors and etc. 3. Enforce regulations |
| 18:30 – 20:00 | Reception |
| Wednesday, 25th September 2019 | |
| Session 3. Further Enhance Regional Cooperation in Addressing Marine Litter | |
| (Speakers will update global and regional approaches and opportunities to address marine litter) Presentations of 15 mins followed by Q&A 5 mins <u>Chair:</u> NOWPAP RCU | |
| 09:00 – 09:20 | <i>UN Environment response to marine litter: Progress since the last NOWPAP-TEMM Workshop in 2018</i> Mr. LIU Ning, NOWPAP RCU, UN Environment Programme |
| 09:20 – 09:40 | <i>Updates of UN Environment International Environmental Technology Centre (IETC) including the reports on the effectiveness of single use plastic legislation (2018) and Waste to Energy solutions (2019)</i> |

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| | Mr. Keith ALVERSON, Director, International Environmental Technology Centre, United Nations Environment Programme |
| 09:40 – 10:00 | <i>Address marine litter in Southeast Asia countries</i> Ms. Natalie HARMS, Associate Programme Officer, Secretariat of the Coordinating Body on the Seas of East Asia (COBSEA), United Nations Environment Programme Regional Office for Asia and the Pacific |
| 10:00 – 10:20 | <i>Promotion of Trilateral Environmental Cooperation and Roles of Trilateral Cooperation Secretariat</i> Ms. Huang Wandu, Economic Affairs Officer, Department of Economic Affairs, Trilateral Cooperation Secretariat |
| 10:20 – 10:40 | Coffee break |
| 10:40 – 11:00 | <i>Asian Regional overview of marine litter and marine litter hotspot assessment methodology</i> Mr. Jinhua Zhang, Programme Officer, United Nations Environment Programme Regional Office for Asia and the Pacific |
| 11:00 – 11:50 | Roundtable discussion: further enhance regional cooperation in addressing marine litter Speakers in this session will be invited to the stage. The discussion will focus on 1. Synergy opportunities to address marine litter in the region; 2. Data collection and sharing |
| 11:50 – 12:00 | <i>Introduction of ICC</i> Mr. Dawei SONG, Dalian Ecology and Environment Bureau |

12:00 – 13:00

Lunch Break

13:00 – 17:00

International Coastal Clean-up (ICC) at No. 1 Yingbin Road, Zhongshan District, Dalian

13:00 (sharp)

Bus leaves the hotel for ICC 2019

Ca. 13:30 – 14:00

Opening remarks and introduction to ICC
NOWPAP RCU
Dalian representative

14:00 – 16:30

Beach clean-up (all participants) and group photo

16:30

Bus returns to the hotel

ANNEX 2: List of meeting participants

People's Republic of China

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