



UNEP and NOWPAP efforts in dealing with marine litter

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Injector found on the coast with blood inside



(Source: Shin-Kotobikihama News Website)





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Marine Litter:
Global Threat,
Global Challenge





Just an example: amount and cost...

Plastic waste inputs from land into the ocean, according to an article by Nenna R. Jambeck (Nature, February 2015): **4.8-12.7 million tons** entering the ocean.

Without waste management infrastructure improvements, the cumulative quantity of plastic waste available to enter the ocean from land is predicted to **increase by an order of magnitude** by 2025.

UNEP-supported report Valuing Plastic, estimates the natural capital loss due to plastic in the marine environment as at least **US\$ 13 billion** per year. This includes financial losses incurred by fisheries and tourism as well as time spent cleaning up beaches.

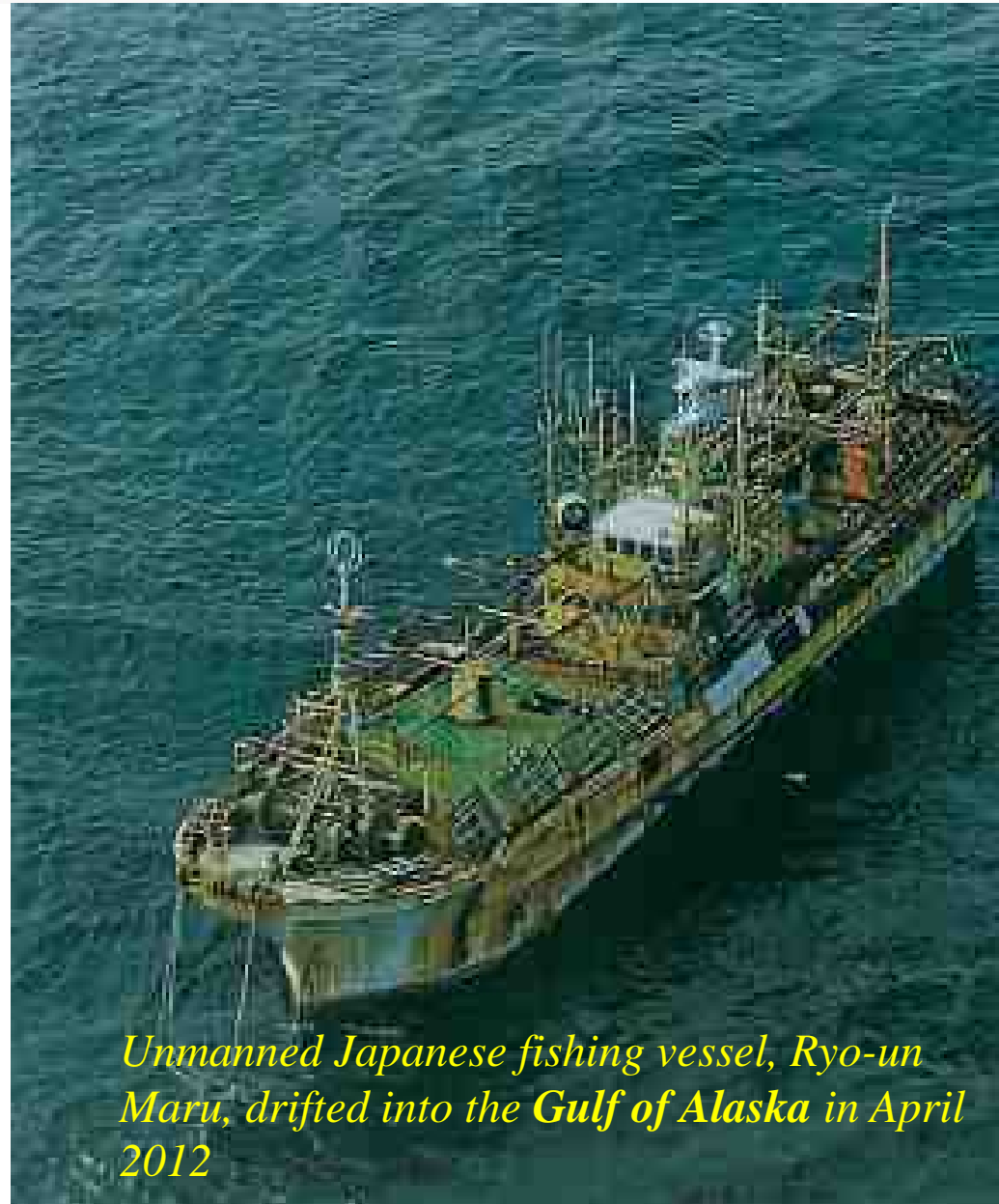




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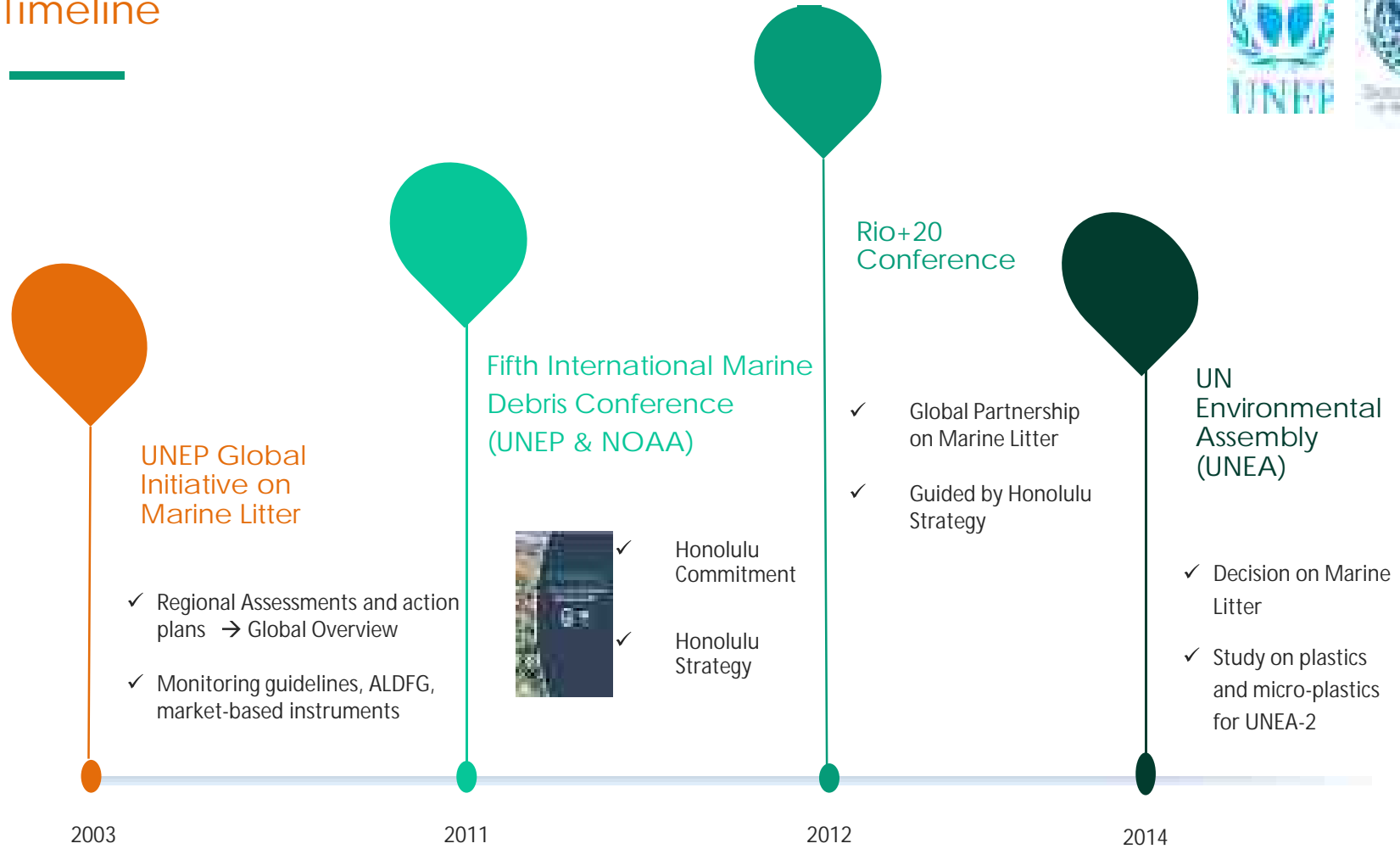


A trans-boundary
problem



Unmanned Japanese fishing vessel, Ryo-un Maru, drifted into the Gulf of Alaska in April 2012

Timeline





Regional Seas Conventions & Action Plans



West to East: North-East Pacific, South-East Pacific, Wider Caribbean, West & Central Africa, Mediterranean, Black Sea, Eastern Africa, Red Sea & Gulf of Aden, NOPME Sea Area, South Asian Seas, East Asian Seas, North-West Pacific, Pacific, Partner programmes, Arctic, North-East Atlantic, Baltic Sea, Caspian Sea, Antarctic.



Regional Seas Conventions & Action Plans

SE Pacific
NW Pacific
Black Sea
PERSGA region
East Asian Seas
Caspian region
NE Atlantic

Plus:
Mediterranean Sea
Caribbean Sea
Baltic Sea
and other regions





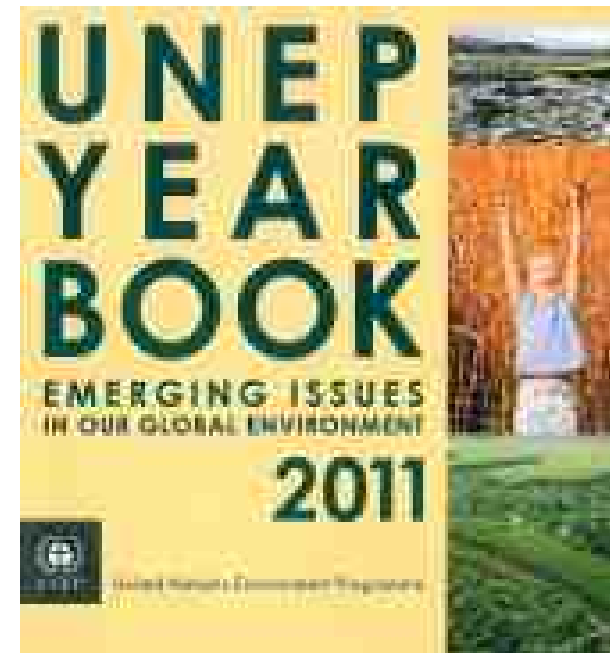
UNEP efforts

UNEP Yearbook

“Emerging issues in our global environment”

Plastic Debris in the Ocean

- Assessing the extent of the problem
- Physical and chemical impacts
- Social and economic effects: ‘wider than the ocean’
- Tackling the issues, managing the problems
- Looking ahead





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UNEP efforts

The 5th IMDC (2011)



Co-organized by UNEP and NOAA, and took place in Honolulu, USA from 20-25 March 2011.



Honolulu Strategy

“Honolulu Strategy - framework for a comprehensive and global effort to reduce the ecological, human health, and economic impacts of marine debris globally”

Intended for use as a:

- **Planning tool** for developing or refining spatially or sector-specific marine debris programs and projects
- **Common frame of reference** for collaboration and sharing of BP and lessons learned
- **Monitoring tool** to measure progress across multiple programs and projects



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UNEP efforts



The Honolulu Commitment



Adopted at the Conference, to establish a cross sectoral approach to help reduce occurrence of marine debris, as well as the damage it causes to marine habitat

Marks the first step in developing a comprehensive global platform for the prevention, reduction and management of marine debris, to be known as the ***Honolulu Strategy***

GPML and regional node





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UNEP efforts

UN Environment Assembly (2014) – Resolution 27/6 on Marine Plastic Debris and Micro-plastics:

- “Encourages Governments, intergovernmental organizations, industry and others to cooperate with the Global Partnership on Marine Litter “
- “Emphasizes that further urgent action is needed to address the challenges posed by marine plastic debris and micro-plastics, by addressing such materials at source”
- “Encourages Governments and the private sector to promote more resource-efficient use and sound management of plastics and micro-plastics”
- “Requests UNEP Executive Director to present a study on micro-plastics to UNEA-2”



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Major publications on marine litter

UNEP Marine Litter: A Global Challenge

FAO Abandoned, lost or otherwise discarded fishing gear

UNESCO IOC

UNEP/IOC Guidelines on Survey and Monitoring of Marine Litter

GESAMP

Sources, Fate and Effects of Micro-plastics in the Marine Environment - A Global Assessment

www.nowpap.org





Recent publications

- **Biodegradable Plastics and Marine Litter (2015)**

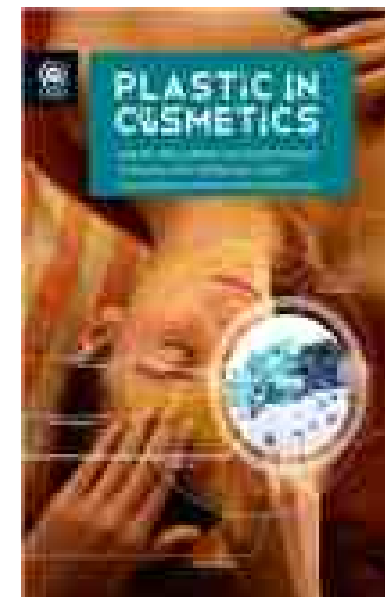
Misconceptions, concerns and impacts on marine environments

- **Valuing Plastic (2014)**

13 billion USD per year

- **Plastics in Cosmetics (2015)**

Are we polluting the environment through our personal care?





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NOWPAP efforts



MALITA, 2005-2007

To assist NOWPAP countries in the environmental protection and sustainable development of the NOWPAP region through the development of a NOWPAP Regional Action Plan on Marine Litter

RAP MALI, 2008-2015-....

To improve the quality of the marine and coastal environment of the Northwest Pacific region by addressing the marine litter problem through cooperation and partnerships





Toward RAP MALI (2005-2008)



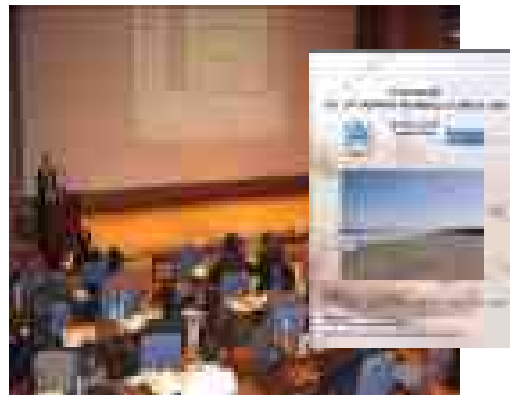
**International ML Workshop
Toyama, Japan, 2005**



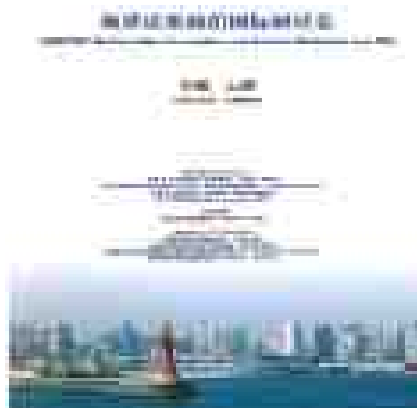
**1st NOWPAP ML Workshop
Incheon, Korea, 2006**



1st MALITA Working Meeting



**2nd NOWPAP ML Workshop
Toyama, Japan, 2007**



**3rd NOWPAP ML Workshop
Dalian, China, 2008**



2nd MALITA Working Meeting

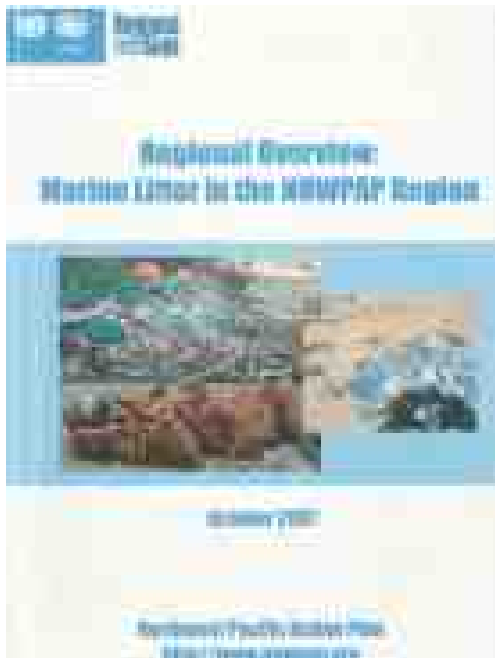


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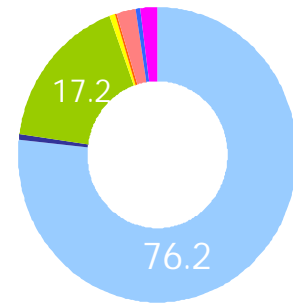
Toward RAP MALI (2005-2008)

Regional Overview on Marine Litter in NOWPAP Region

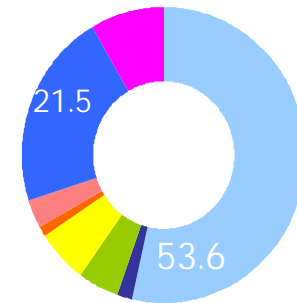


- Others
- Metal
- Glass/Ceramic
- Cloth
- Paper
- Polystyrene
- Rubber
- Plastic

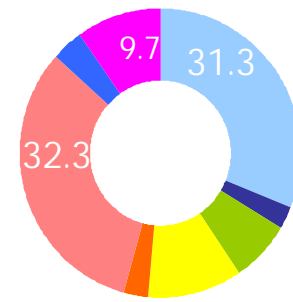
% in number



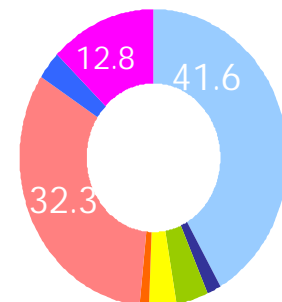
Japan



Korea



China

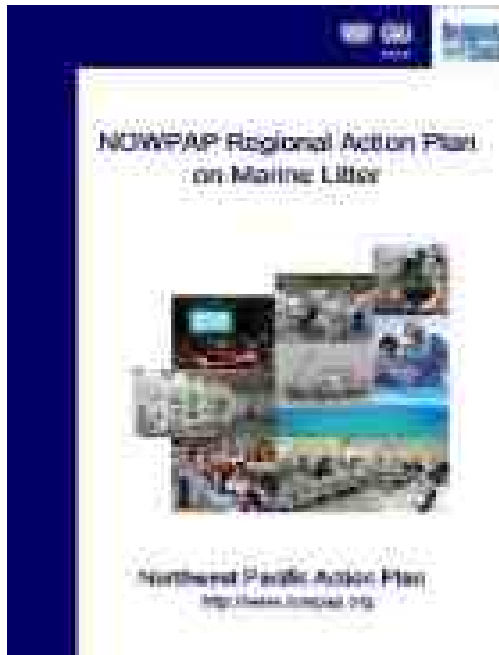


Russia

Source: NPEC (2002-2005)



NOWPAP RAP MALI



3 key elements

Prevent ML input

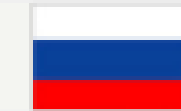
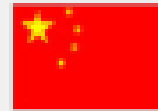
Monitoring quantities and distribution of ML

Remove existing ML

Approved in March 2008



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NOWPAP mechanism

ML National Focal Points

NGOs

CEARAC

-Special Monitoring and Coastal Assessment

DINRAC

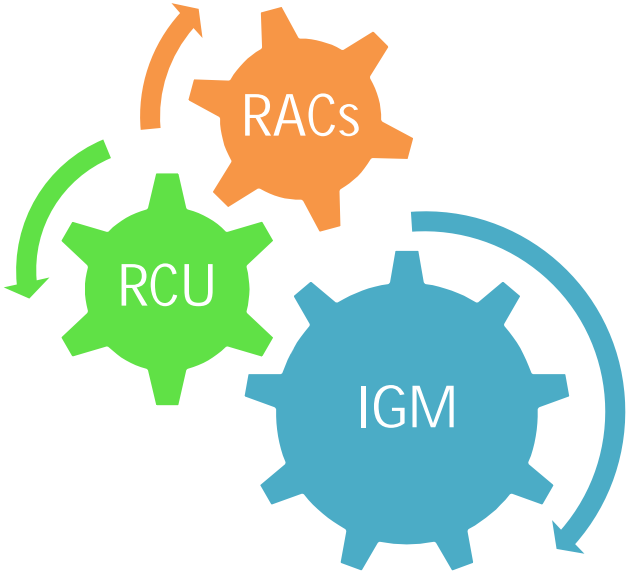
- Data and Information

MERRAC

- Marine Environment Emergency Preparedness and Response

POMRAC

- Pollution Monitoring





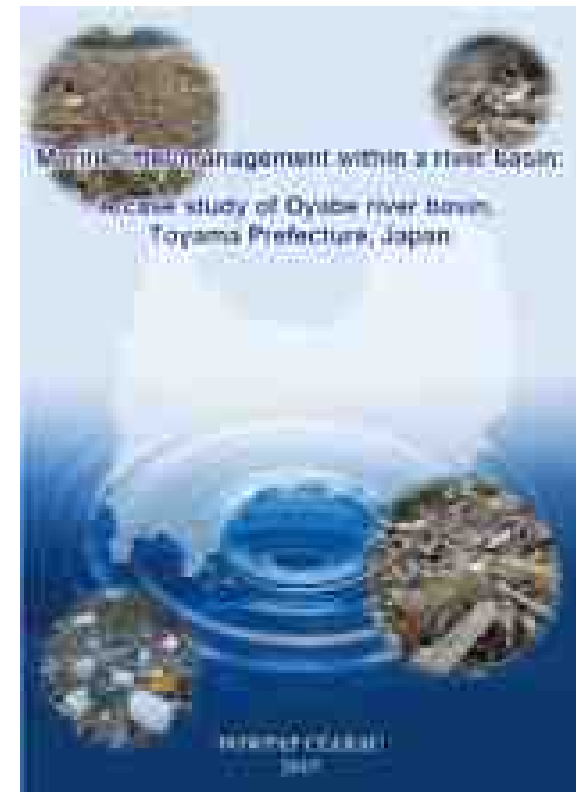
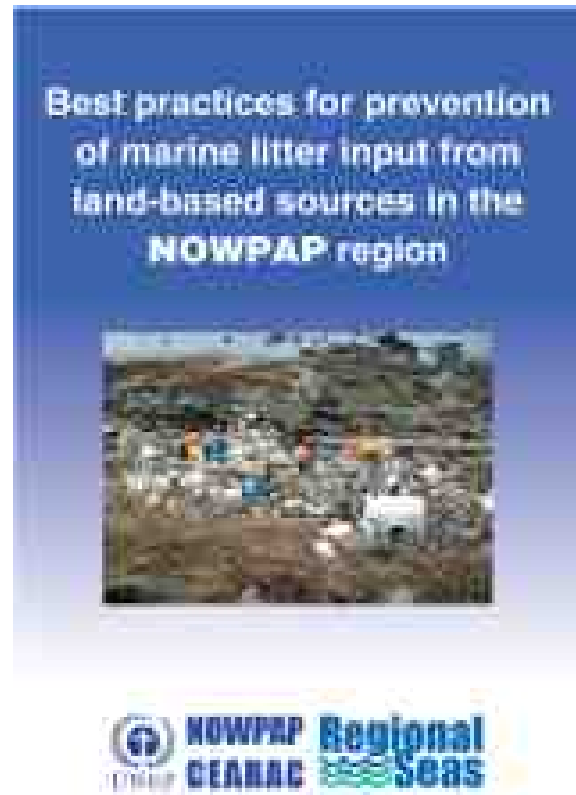
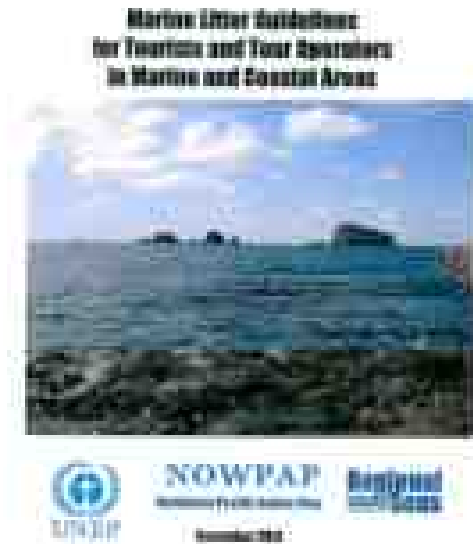
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RACs activities on marine litter

CEARAC:

➔ **Land-based** marine litter



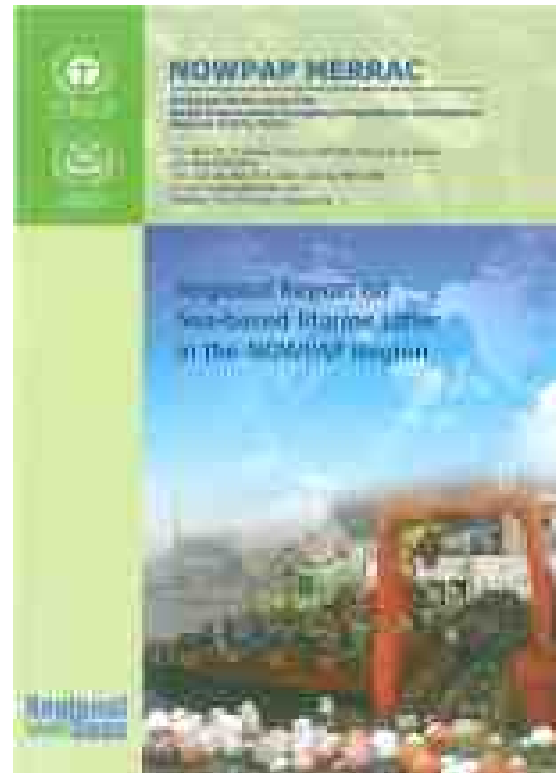


RACs activities on marine litter

MERRAC:



Sea-based marine litter





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RACs activities on marine litter

DINRAC:  **Database** on marine litter distribution and composition

- Marine litter monitoring data (national)

➤ Monitoring data since 2003 are available online!





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RACs activities on marine litter

POMRAC: ➔ **Promotion** of marine litter-related activities

- Translation of reports and guidelines
- Organization of beach cleanup campaigns
- Research: no special fee system in ports, micro-plastics





Organization of ICC Campaigns (2006-2015)

Jeju, Korea (2010)

Hirado, Japan (2010)

Lianyungang, China (2011)



Yamagata, Japan (2006)



Yantai, China (2015)

Vladivostok, Russia (2012)



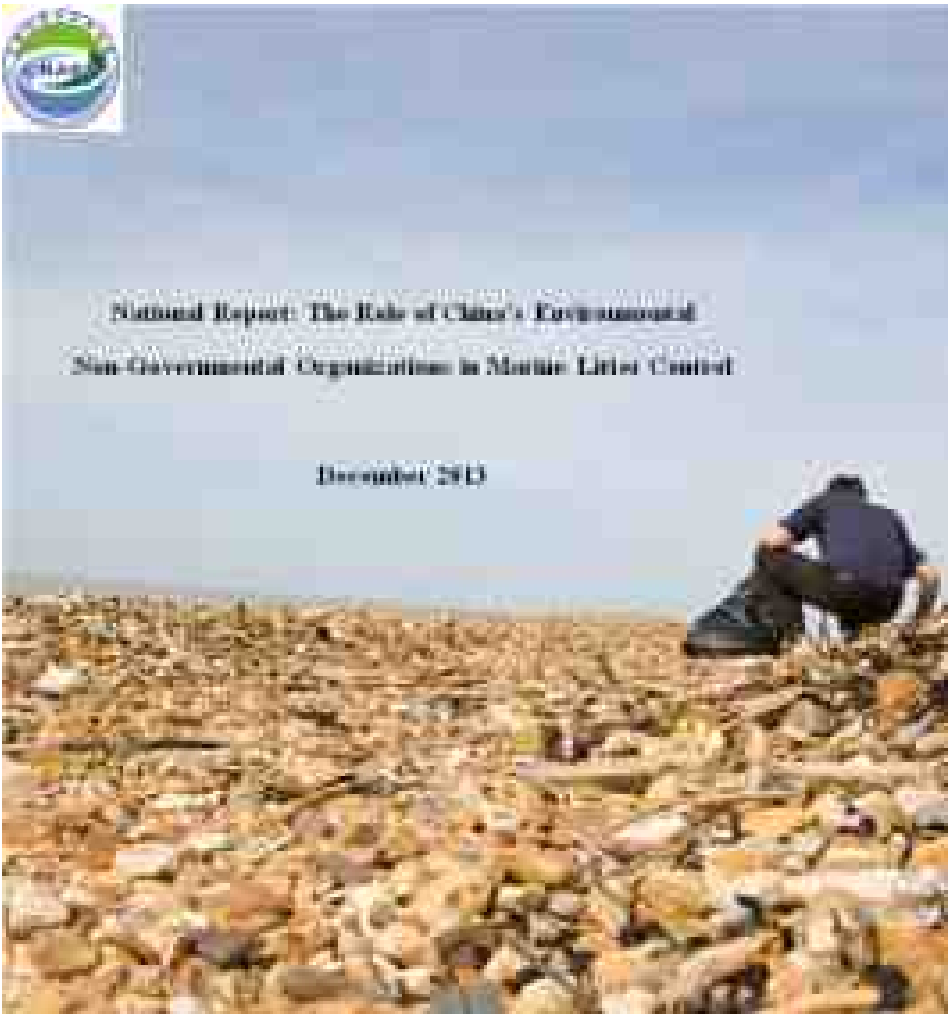
Okinawa, Japan (2013)

Boryeong, Korea (2014)



National efforts - China

Mobilizing NGOs



National efforts - China

An example: reuse of discarded fishing nets

Xijidang is a famous village in Lianyungang for the reuse of discarded fishing nets. Among the 40,000 tons of nets discarded in China, about 35,000 tons of nets became useful goods in this village.



National efforts - China

Restrictions to the free use of plastic bags in markets (from June 2008)

- No free use of thin plastic bags
- It is estimated that 40 billion plastic bags are “removed” per year by this initiative



Gornostay bay landfill (dump)



The year of trash dump opening

- 1967

The total area

- 160 000 m²

The area covered with garbage

- 85 000 m²

Waste volume as of 2010

- 1 800 000 m³

Gornostay bay landfill (dump)

- **back walls built,**
- **heat sources extinguished,**
- **bank slope fixed,**
- **gas outlet built,**
- **storm water drainage made,**
- **observation holes system established.**



Beach cleanup in Primorsky Kray



- Community work day, Russky island



- Community work day, Artyem city



- Community work day, Nakhodka city

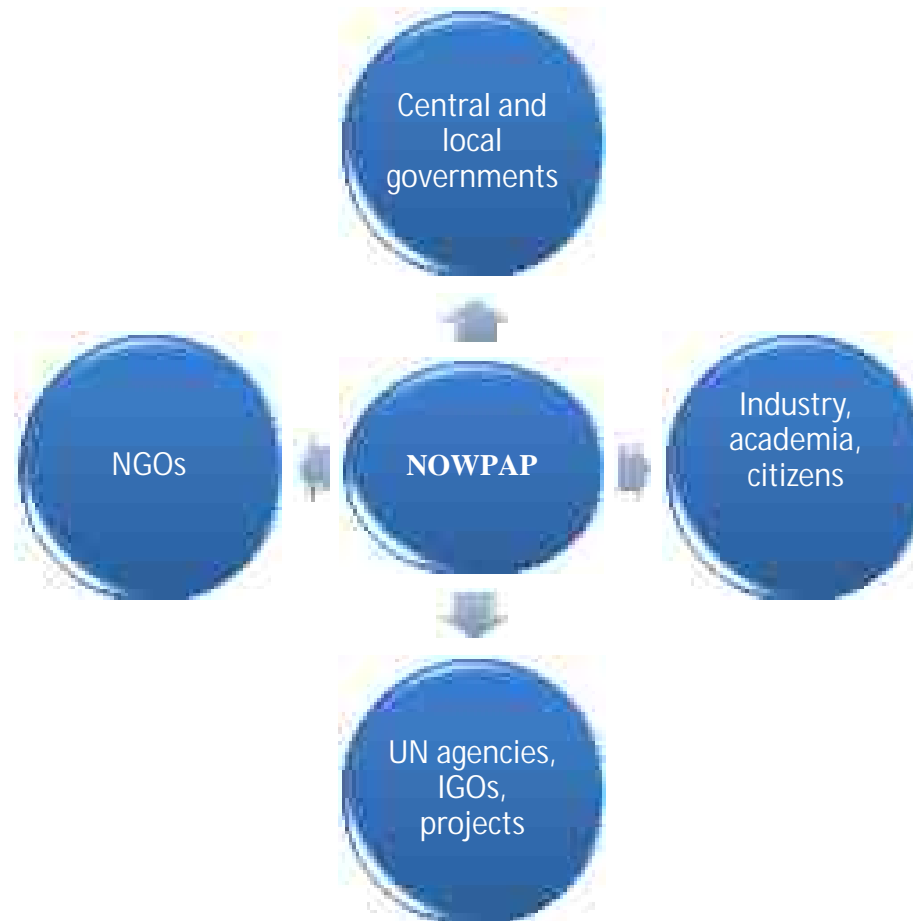


Suggestions:

- Focusing on ML points of origin (sources)
- Changing industry perspective/approach
- Educating public
- Changing behavior
- Enhancing regional/international cooperation



Partnership building to deal with ML





G7 summit (7-8 June 2015):

- Marine litter mentioned in the Leaders' Declaration
- In the Annex to Declaration, a G7 Action Plan to combat marine litter is described, including land- and sea-based sources, removal, education, research and outreach
- Japan is hosting a G7 summit in May 2016



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Thank you for your
attention

www.unep.org/gpa/gpml

www.marinelitternetwork.org

