

Outcomes of the G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth in Karuizawa, Nagano, Japan

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1. Current Problems on Marine Plastic Litter

Beach litter along the coastline



Tobishima, Sakata, Yamagata



Tsushima, Nagasaki

*Samples of drifted wastes



Plastic container



Fishing gear



Detergent container

Negative impacts

- Concerns regarding marine life
- Obstruction for ship sailing
- Impacts on tourism and fishery
- Impacts on the residential environment along the coast



Photograph by Saeed Rashid

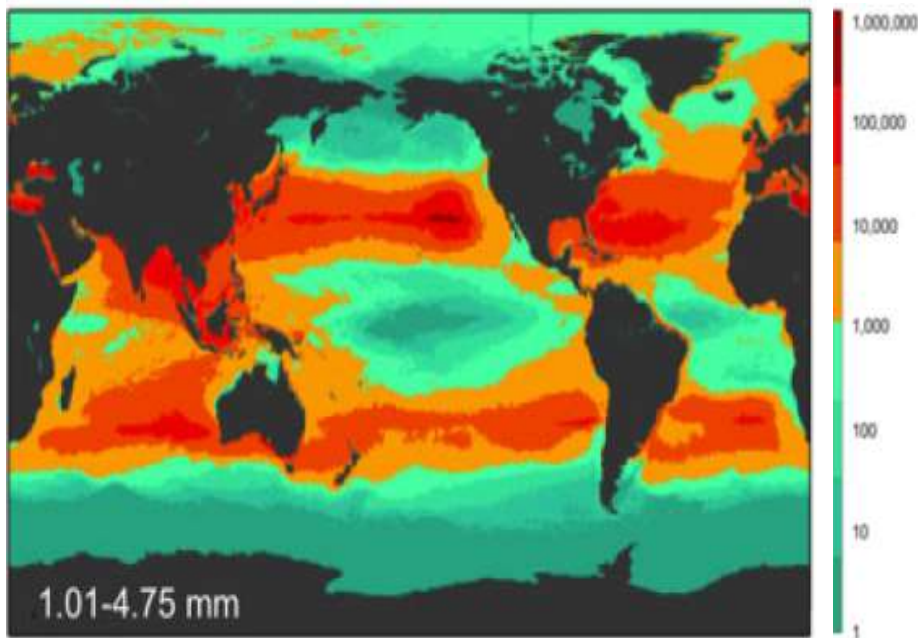


*A whale has died after swallowing more than 80 plastic bags
Source: Ministry of Natural Resources and Environment, Thailand*



*Small plastic fragments
Source: Isobe lab, Kyusyu university*

<Global Marine Plastic Pollution>



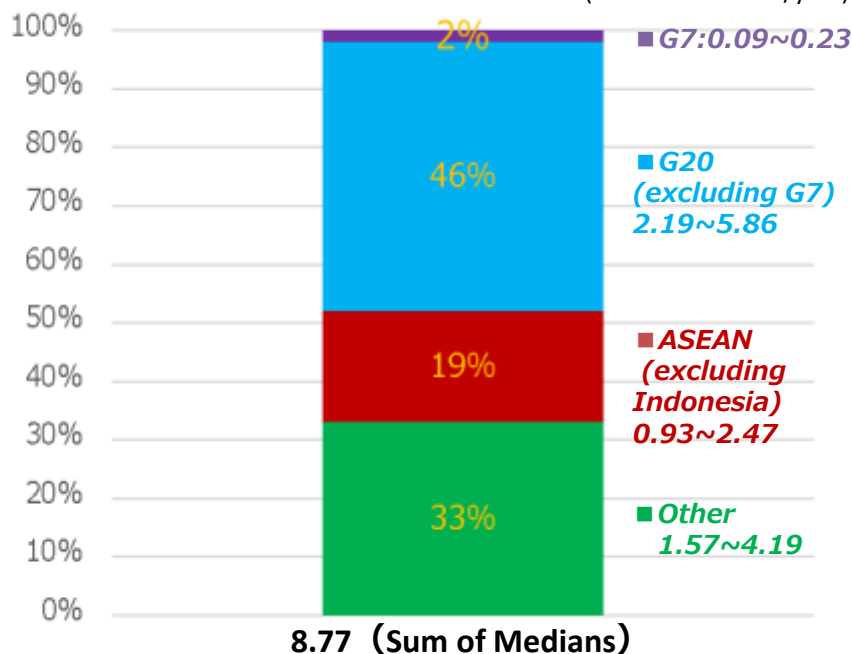
Distribution Density of microplastics (1~4.75mm) (model projection)

(Source) Erikson et al. : (2014), "Plastic Pollution in the World's Oceans: More than 5 Trillion Plastic Pieces Weighing over 250,000 Tons Afloat at Sea", PLoS One 9 (12), doi:10.1371/journal.pone.0111913

Color bar
(Unit: pieces km⁻²)
Yellow: 1,000-10,000
Orange: 10,000-100,000
Red: 100,000-1,000,000

<Marine Plastic Litter by Region>

(Unit: million tons /year)



(Note) The ratio is calculated by using medians of respective estimates.

(Source) Jambeck et al. : Plastic waste inputs from land into the ocean, Science (2015)

- ◆ Estimation by a researcher based on population density, economic status, and etc.
- ◆ There is no agreed international statistics on Marine Plastic Litter.

2. Outcome of the G20 on Marine Plastic Litter

Presidency Press Conference by Prime Minister Shinzo Abe Following the G20 Osaka Summit



“Marine plastic litter is another issue which cannot be resolved by some countries alone. Under such circumstances, **the fact that the G20 was able to unite and share the “Osaka Blue Ocean Vision,” which aims to reduce additional pollution by marine plastic litter to zero by 2050, represents a major step forward towards resolving this issue.**

We also agreed on a concrete implementation framework for achieving this vision. Japan will fully leverage its technologies and experience to support waste management and human resources development in developing countries and contribute to the global efforts to address this issue making the most of its characteristics.”

Osaka Blue Ocean Vision

- G20 leaders shared the Osaka Blue Ocean Vision **as a common global vision**
- They also called on other members of the international community to also share this vision for protecting the world's oceans



"We **aim to reduce additional pollution by marine plastic litter to zero by 2050** through a comprehensive life-cycle approach that includes reducing the discharge of mismanaged plastic litter by improved waste management and innovative solutions while recognizing the important role of plastics for society."

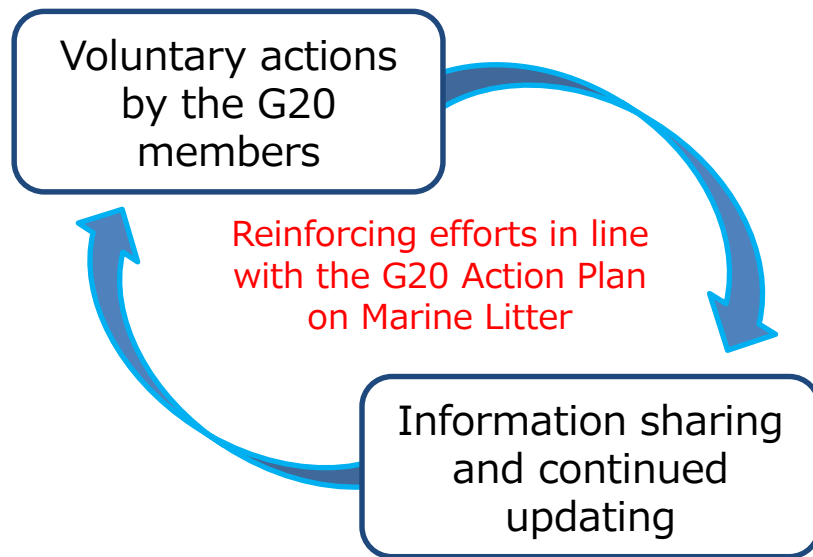
G20 Implementation Framework

- Adopted on G20 Ministerial Meeting on Energy Transitions and Global Environment for Sustainable Growth
- Also endorsed by G20 Osaka Summit

"We also endorse the G20 Implementation Framework for Actions on Marine Plastic Litter. "

Facilitating the Effective Implementation

- **Promoting a life-cycle approach** including sound waste management, marine litter cleaned up, promotion and deployment of innovative solutions, and international cooperation in order to support each countries in strengthening their capacity.
- Sharing and updating information on relevant policies, plans and measures.
Utilizing opportunities of G20 Resource Efficiency Dialogue for the first info sharing.



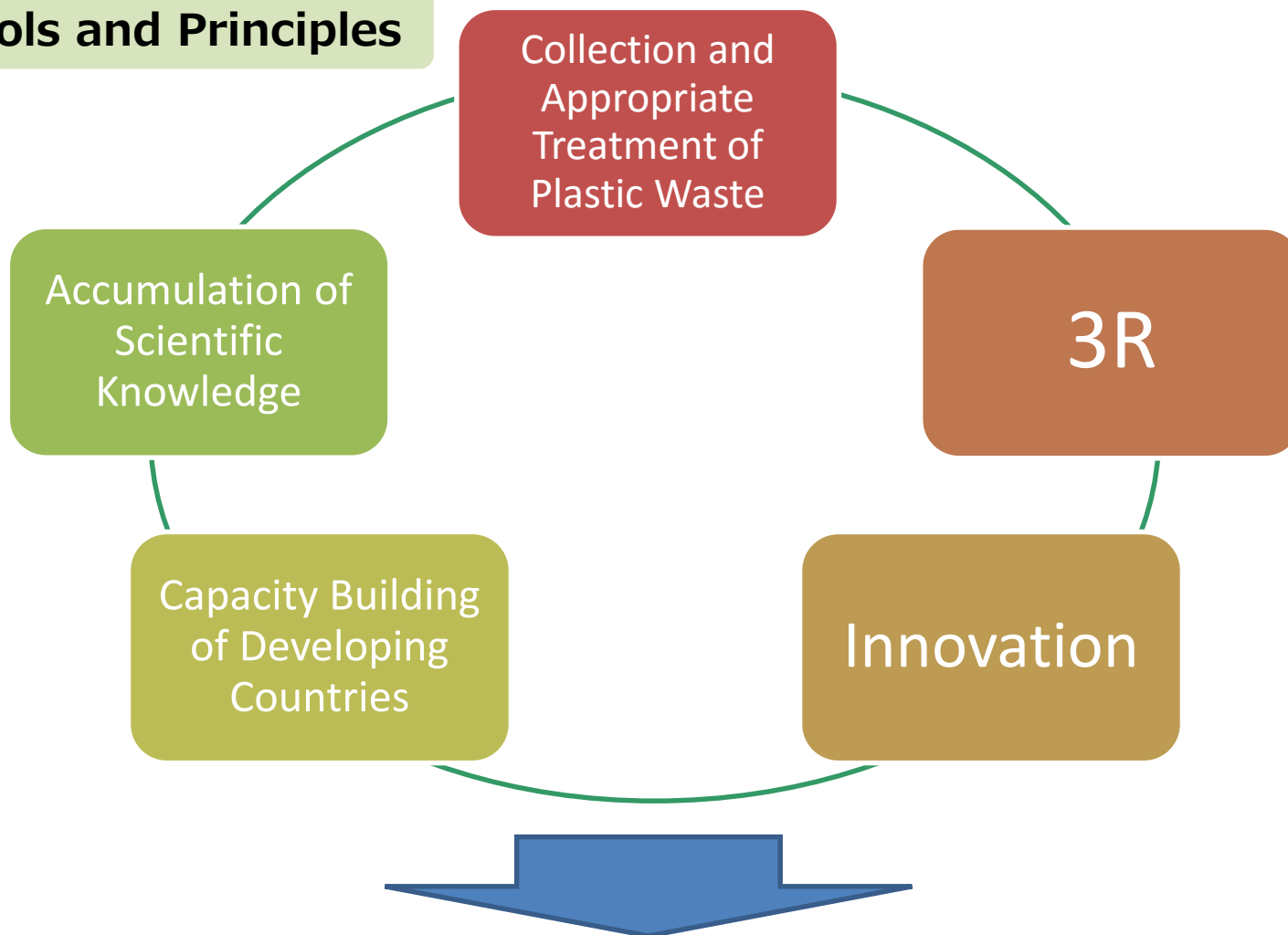
Collaboration among G20 members and outreach activities

- Promotion of international cooperation
- Promotion of innovative solutions
- Sharing scientific information and knowledge
- Multi-stakeholder involvement and awareness raising



2. Japan's Policy to Realize the Osaka Blue Ocean Vision

Policy Tools and Principles



Realize the Osaka blue ocean vision

Japan's initiatives to input into the Implementation Framework

Reduce/ Convert to Substitute Materials	Convert to Substitute Materials <ul style="list-style-type: none">● Aid for converting to substitute materials● Japan Clean Ocean Material Alliance● Roadmap for introduction of marine biodegradables	Reduce <ul style="list-style-type: none">● Green purchasing: Abolish using single-use plastics at meetings, cafeterias, etc.● Initiatives within business circles:<ul style="list-style-type: none">- Abolish distribution of plastic straws (food and drink industry, etc.)- Convert to paper or biodegradable containers (convenience stores)	
Recycle/ Reuse Resources	Establish Domestic Resource Circulation System <ul style="list-style-type: none">● Aid for constructing recycling facilities● Initiatives within business circles:<ul style="list-style-type: none">- Declaration to make all beverage containers recyclable (100% efficient utilization of PET bottles by 2030)- Strategy for recycling resources by the Japan Plastics Industry Federation- Declaration for the resources circulation by the Plastic Packaging Recycling Council		
Measures Against Marine Plastic Litter	Measures Against Marine Litter in Japan <ul style="list-style-type: none">● Aid for the processing of waste articles that drift ashore● Measures against discarded fishing gears and waste articles that drift ashore, etc● Measures against microplastics	International Cooperation <ul style="list-style-type: none">● International cooperation in the field of waste management and recycling● ASEAN +3 Marine Plastics Debris Cooperative Action Initiative● UN Environment Assembly (UNEA) 4● Asian Development Bank (ADB)● Open a knowledge center on marine litter at ERIA	
National Movement/ Awareness Raising	Plastics Smart <ul style="list-style-type: none">● Plastics Smart : Utilize social media etc. to spread various ways to “form positive relationship with plastics”● Plastics Smart Forum	Public-Private Innovative Cooperative Framework on Marine Plastics <ul style="list-style-type: none">● Public-Private Innovative Cooperative Framework on Marine Plastics	UMIGOMI Zero Week <ul style="list-style-type: none">● UMIGOMI Zero Week: to conduct nationwide cleaning activities● UMIGOMI Zero Award

Strongly support for the development of innovative substitute material technologies

Aid for converting to substitute materials : 3.5 billion JPY for FY 2019

① Marine Biodegradable Plastics

Demonstration of the production of plant-derived marine biodegradable plastics using Japan's unique technology



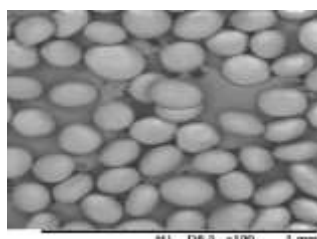
② Bioplastics

New resin utilizing our Japan's plant-derived plastic manufacturing technology



③ Cellulose

Cellulosic microbeads using cellophane manufacturing technology which Japan holds 70% of global share



④ Paper

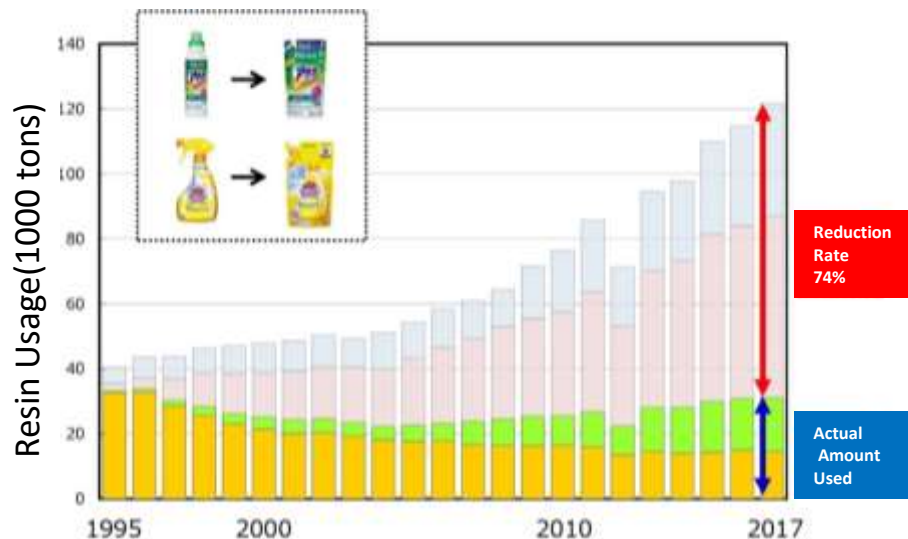
Functional paper containers by Japan's world-class paper industry



From refill to replace: Smart Holder (Kao Corporation)

- By inserting a pump into the Raku-raku Eco Pack and placing it into a holder developed specially for this system, users can now enjoy the pack as their primary package, with the added benefit of being able to use the content to the last drop.
- The amount of plastic used in the replacement container is about one-sixth that of the bottle container, resulting a significant reduction in usage of plastics.

Reduce Plastics (Promote Replacement)



Smart holder

Advanced Effort to Reduce Plastic Bags (Toyama Prefecture)

- In 2007, Toyama Prefecture established a council for reducing plastic bags by consumer groups, businesses, and governments.
- Since establishment, percentage of people using reusable shopping bags in partner stores maintains around 90%.
- Partner stores increased to 53 companies and 514 stores.
- Total number of plastic bags have been reduced over 1.5 billion by FY2018 (1400 pieces per prefectural citizen in 11 years).



ノーレジ袋県民大運動2008!!
レジ袋いらんちゃ!!

コンビニでも
ドラッグストアでも
クリーニング店でも
スーパーでも
デパートでも
みんなで参加!!

サクラの開花の早まり、真夏日の増加、カエデの紅葉の遅れ。
地球温暖化の影響は、県内でもすでに現れています。
このままでは今後30年で気温が最大1.2℃上昇して、
洪水や暴風雨が増加し、最大30%の生物種が絶滅すると言われています。
地球温暖化を防ぐために今すぐ必要なこと、それは、
一人ひとりが生活の中のむだをなくして、「環境にやさしい生活スタイル」へ変えること。
レジ袋を断り、マイバッグを使うことは、その第一歩です。
あなたも、レジ袋を断ることから「環境にやさしい生活スタイル」をはじめませんか?

レジ袋からマイバッグへ
まずはスーパー・クリーニング店から
MY BAG

レジ袋の無料配布の取り止め、4月1日からスタート

環境とやま県民会議・富山県レジ袋削減推進協議会・富山県・(財)とやま環境財団

“Spo-GOMI” (Sports × Litter Pick-ups)

“Spo-GOMI”(Sports×Litter pick-ups) is a Japan original and the most Earth-friendly sports which a team of up to 5 people compete for the quantity and quality of garbage collected in a designated area within a time limit of 1 hour.

SO far, about 800 tournaments has been held with total of about 88,000 participants. Also, tournaments are held in places such as Russia, Myanmar, South Korea, Panama, Hawaii.



JICA support for dissemination and awareness of collection of separated garbages



Waste-to-energy plant constructed under the support of Japan

Thank you for
your Attention

