Voluntary Action Plan for Establishing a Sound Material-Cycle Society - Results of Fiscal 2020 Follow-up-<Overview>

March 16, 2021 Keidanren

1. Voluntary Action Plan for Establishing a Sound Material-Cycle Society (FY2016-)

* 45 participating industries

(1) Reductions in final waste disposal volume of industrial waste (Fourth Target)

⇒ Industry as a whole "aims to reduce **by fiscal 2020**, the final disposal volume of appropriately treated industrial waste by **70% from the actual performance level in fiscal 2000** " with consideration of the achievement of a low-carbon society.

(2) Industry-specific targets with a view to improve the quality of resource circulation

⇒ <u>Set up individual targets</u> based on consideration of industry-specific characteristics and circumstances for <u>improving the</u> <u>quality of resource circulation</u>.(e.g. target recycling rate for byproducts generated during a product's manufacturing stage)

(3) "Industry-specific plastic-related targets" (fiscal 2019-)

⇒Based on the Keidanren's "Opinion on formulating the 'Resource Circulation Strategy for Plastics'" (Nov. 2018), <u>set up industry-</u> specific targets contributing to resolving marine plastic litter issues and promote plastic resource circulation.

Background (reference)

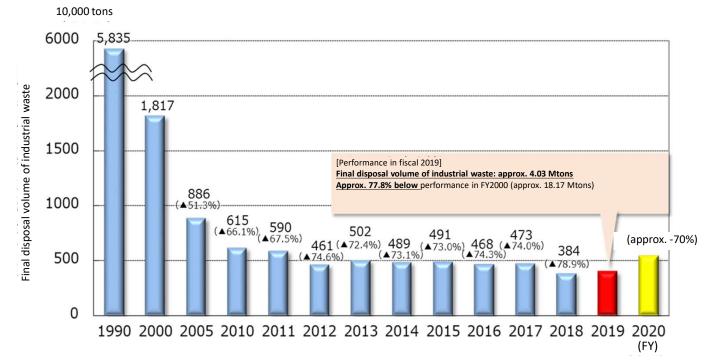
(1)1997 (2) Dec. 1999 (3) Mar. 2007	Formulated the Voluntary Action Plan on the Environment (Section on Waste Disposal Measures); annual follow-ups Set up First Target: 75% below FY1990 performance level of final disposal volume of industrial waste in FY2010 Renewed to the Voluntary Action Plan on the Environment (Section on the Establishment of a Sound Material-Cycle Society)
	Set up Second Target: 86% below FY1990 performance level of final disposal volume of industrial waste in FY2010 Set up industry-specific targets (using indicators other than final disposal volume)
(4) Dec. 2010	Third Target: 65% below FY2000 performance level of final disposal volume of industrial waste in FY2015 Set up industry-specific targets (using indicators other than final disposal volume)
(5) Mar. 2016 (6) Apr. 2019	Renewed to Voluntary Action Plan for Establishing a Sound Material-Cycle Society, Set up abovementioned targets Set up "Industry-specific plastic targets"

2. Performance in fiscal 2019: (1) Reductions in final disposal volume of industrial waste (Fourth Target)

- Supported by the high standards of Japanese companies, <u>approx. 77.8% below performance in fiscal 2000</u> (baseline year), <u>overachieving the target level of the Plan (reduction by around 70%)</u>

This is assumed to be a consequence of increased construction work resulting from measures to maintain the functions of important infrastructure for disaster prevention and mitigation, while industries advanced their efforts to reduce industrial waste volume and to promote the 3Rs (reduce, reuse and recycle).

<Total final disposal volume of industrial waste general by participating industries>



2. (2) Industry-specific targets & efforts

♦42 industries set up and engaged in efforts toward individual targets in line with industrial characteristics and circumstances

(Examples of industry-specific targets)

- Achieve recycling rate of around 95% in FY2020
- Maintain volume of industrial waste generated at levels not exceeding 1,000 ton
- Reduce volume of municipal solid waste from business activities by 55% from fiscal 2000 level.
- Reduce volume of paper containers and packaging used per unit sales by 50% relative to year 2000 levels
- Achieve a procurement rate of at least 75% for recycled paper and environment-friendly paper
- Achieve a steel can recycling rate of at least 90%
- Maintain zero emission (final disposal rate of 1%)
- Maintain a recycle rate of 100%

♦ In addition to target-based efforts, industries were engaged in efforts towards establishing a sound material-cycle society

(Examples of efforts)

<Efforts to reduce environmental burden through product life cycles>

- Establish recycling routes through collaboration across the supply chain
- Design products that are easy to recycle
- Visualize environmental effects by implementing product LCA
- Consider labelling programs for environment-friendly products
- Receive and treat waste from other industries and contribute to reducing final disposal volumes
- Formulate and implement product assessment manuals
- Omit and simplify packing and introduce returnable packing material

<Development of new technologies and products>

- Develop technologies to utilize biomass
- Develop technologies to recover energy from waste

- Generate biogas from waste
- Develop recyclable containers and packaging

<International contribution / overseas activities>

- Support introduction of recycling systems
- Provide biomass power generation boilers to Southeast Asia, etc.
- Engage in overseas tree-planting activities
- Implement overseas CO2 reduction support projects

<Other>

- Beautification and cleanup activities in rivers, beaches and roads
- Promote paperless operation through digitization

- Cooperate in treating disaster-related waste treatment
- Participate in environment-related events

2. (3) Industry-specific plastic-related targets

- From the perspective of deepening voluntary approaches by the business community that <u>contribute to solving</u> <u>marine plastic litter issues and promoting plastic resource circulation</u> and of expanding the horizons of such efforts, industries set up "industry-specific plastic-related targets" based on the Keidanren Opinion (November 2018).
- **Keidanren will promote these voluntary approaches and seek to contribute to solving plastic issues.**

(Plastic-related quantitative targets (34 targets)

- Quantitative targets, including target recycling rates and effective utilization rates (18 targets)
- Quantitative reduction targets, including targets to reduce weight and volume of use (6 targets)
- Quantitative targets regarding the reduction of final disposal volumes (4 targets)
- Quantitative targets regarding the implementation rate of measures taken by member companies (6 targets)

(Plastic-related qualitative targets (51 targets)

- Targets regarding reuse and recycling efforts and the promotion of such activities (16 targets)
- Targets regarding the promotion of reduction measures (8 targets)
- Targets regarding the promotion of beautification activities in communities, rivers and beaches (4 targets)
- Targets regarding educational and awareness-raising activities targeting member companies and customers (12 targets)
- Targets regarding the development of new technologies, including biomass technologies and recycling technologies (9 targets)
- Targets regarding the proactive purchasing of environment-friendly products and support for environmentally advanced companies (2 targets)

<Reference> Voluntary Action Plan for Promoting the 3Rs in Containers and Packaging

- ○The Liaison Committee of Associations Promoting 3R, comprising 8 containers and packaging recycling organizations, formulated the "Voluntary Action Plan for Promoting the 3Rs in Containers and Packaging" in March 2006, based on Keidanren Proposal "Toward the Establishment of an Effective Recycling System for Containers and Packaging" (October 2005).
- ◇Individual targets have been set up for each material type of container or packaging and annual follow-up surveys are conducted, renewing target levels, as required.

<Recycling rate targets and performance>

<Reduction rate targets and performance>

Material	Indicator	FY2020 target	FY2018 performance
Glass bottles		No less than 70%	67.6%
PET bottles	Recycling rate	No less than 85%	85.8%
Steel cans		No less than 90%	93.3%
Aluminum cans		No less than 90%	97.9%
Plastic containers and packaging	Recycling rate	No less than 46 $\%$	46.4%
Paper containers and packaging		No less than 28%	26.6%
Paper containers for beverages	Collection rate	No less than 50%	41.4%
Cardboard boxes		No less than 95%	94.6%

Material	Indicator	FY2020 target (relative to FY2004)	FY2019 performance
Glass bottles	Average weight per bottle (can)	1.5% lighter	1.7%
PET bottles		25% lighter	24.8%
Steel cans		8% lighter	8.1%
Aluminum cans		5.5% lighter	5.4%
Plastic containers and packaging	500ml milk carton	3% lighter	2.9%
Cardboard boxes	Average weight per m ²	6.5% lighter	5.5%
Paper containers for beverages	Reduction rate	14%	13.1%
Plastic containers and packaging		16%	17.6%

Reference: PET bottle collection rate: 93.0% (Performance in FY2019)

3. Near future challenges

Understanding the status quo

- Japan has been very successful in its efforts to achieve a Sound Material-Cycle Society, supported by cooperation and collaboration among national government, local governments, operators, consumers and non-profit organizations.
- On the other hand, the circumstances related to efforts toward resource circulation are changing significantly with the emergence of marine plastic litter issues and the introduction or strengthening of bans against plastic waste imports in emerging economies.
- As international collaboration, including agreement on the G20 Implementation Framework for Actions on Marine Plastics Litter and sharing the Osaka Blue Ocean Vision, is taken forward, the resource circulation field is becoming increasingly important.

Challenges and future efforts

- Keidanren will continue to promote the Voluntary Action Plan for Establishing a Sound Material-Cycle Society, <u>and actively and voluntarily engage in the promotion of the 3Rs by</u> not only reducing the final disposal volume of industrial waste, but also improving the quality of the material cycle and **enhancing industry-specific plastic-related targets**.
- In light of the fact that the further promotion of the 3Rs approaching its limits under current technological levels and legal system, it is essential that the Government improves and reviews the administration of the regulatory framework and offers policy support. In particular, given the introduction and strengthening of import restrictions on waste plastics in China, etc. Japan is challenged with the urgent need to re-establish its domestic plastic resource circulation system.
- Guided by the basic principle of "delivering on the SDGs through the Realization of Society 5.0., Keidanren will continue to engage in a wide range of innovations, including not only technological innovations, such as developing new feasible low-cost technologies, but also lifestyle transformations through collaboration and cooperation among various sectors and strata of society. Furthermore, we will promote "Integrated Environmental Corporate
 Management," addressing climate change countermeasures and biodiversity conservation activities, as well as resource circulation measures, as critical business management issues.

<Reference> Policy for the Voluntary Action Plan for Establishing a Sound Material-Cycle Society from 2021 and beyond

- Initiatives taken toward establishing a sound material-cycle society are not only important for Japan, in light of its limited domestic resources, but are increasing their importance globally, given looming resource constraints due to a growing population.
- We also need to address new challenges, including <u>marine plastic litter issues and waste import</u> <u>restrictions adopted by other countries</u>.
- ◇ In our continued efforts to create and promote innovation, we will encourage the Japanese business community to engage in voluntary approaches, under three targets: (1) reduction targets for the final disposal volume of industrial waste; (2) industry-specific targets; and (3) industry-specific plastic-related targets.

(1) Reductions in final disposal volume of industrial waste (Fifth Target)

⇒ The business community will collectively aim for <u>75% reduction by fiscal 2025</u> of the final disposal volume of appropriately treated industrial waste <u>relative to the fiscal 2000 actual performance level</u> with consideration given to achieving a low-carbon society.

(2) Industry-specific targets with a view to improve the quality of resource circulation

⇒ Industries will voluntarily and individually set up <u>industry-specific targets</u> based on consideration of industry-specific characteristics and circumstances for improving the quality of resource circulation.

(3) "Industry-specific plastic-related targets" (fiscal 2019-)

⇒ Industries will set up targets that contribute to <u>solving marine plastic litter issues and to promoting</u> <u>plastic resource circulation.</u> In addition to further enhancing targets, we will <u>widely communicate such</u> <u>efforts in Japan and overseas.</u>