

### **I . Voluntary Action Plan for Establishing a Sound Material-Cycle Society (fiscal 2016-)**

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

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

#### **2. Industry-specific targets with a view to improve the quality of resource recycling .**

⇒ **Set up individual targets** based consideration of industry-specific characteristics and circumstances for **improving the quality of resource recycling**.

(e.g. target recycling rate of byproducts generated during a product's manufacturing stage)

**\* The first year of a target period, a follow-up survey was conducted with the participation of 42 industries.**

#### **Background (reference)**

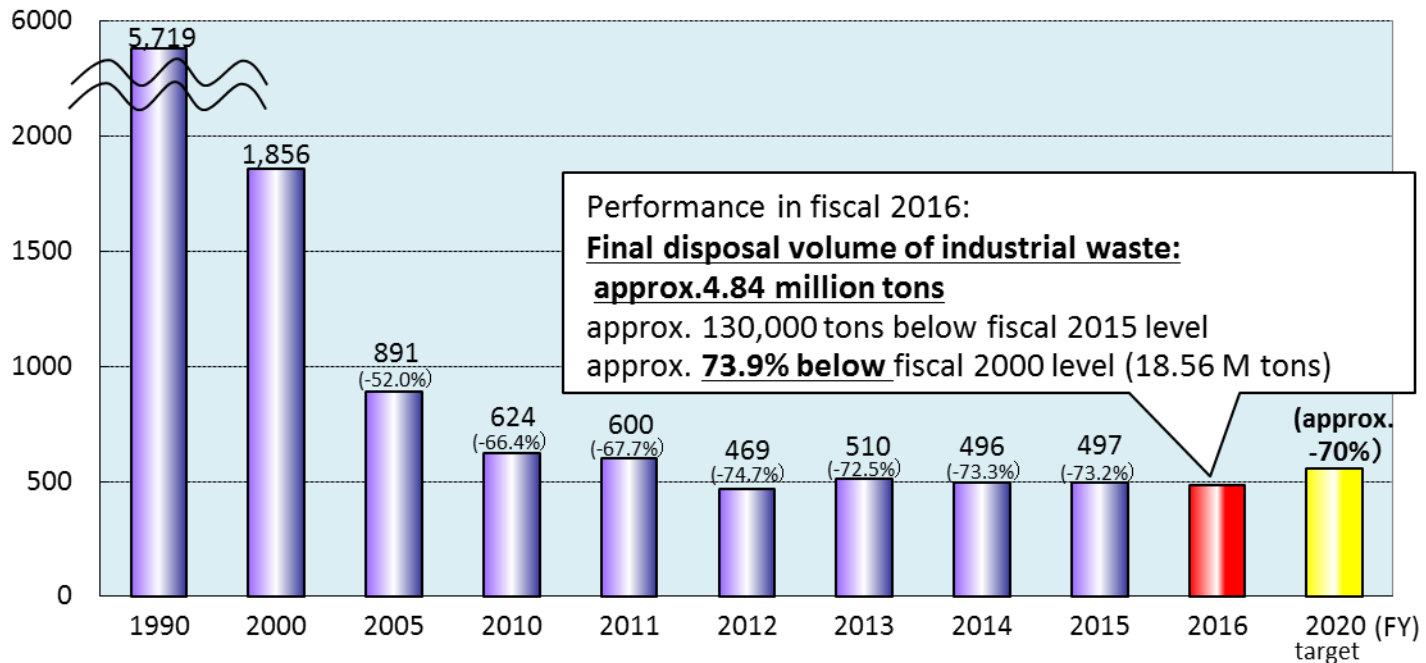
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|---------------|---|
| (1)1997       | Formulated the Voluntary Action Plan on the Environment (Section on Waste Disposal Measures); annual follow-ups   |
| (2) Dec. 1999 | Set up First Target: 75% below FY1990 performance level of final disposal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

**\*Efforts under the current Voluntary Action Plan is showcased as important measures in the Government's Fundamental Plan for Establishing a Sound Material-Cycle Society.**

## II -1. Performance: reductions in final disposal volume of industrial waste (Fourth Target)

- ◇ Final disposal volume of industrial waste in fiscal 2016 (total for 32 industries): approximately 4.84 million tons
- ◇ Relative to performance in fiscal 2015: reductions by approx. 130,000 tons (around 2.6%)
- ◇ Supported by the high standards of Japanese companies, approx. 73.9% below fiscal 2000 (baseline year) performance level (around 91.5% below fiscal 1990 performance level).

Overachieved target level (reduction by around 70%)



## II -2. Performance: industry-specific targets with a view to improving resource recycling

### ◇ 38 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 disposal volume of general waste from business activities by 80% from FY2000 level
- Reduce volume of paper containers and packaging used per unit sales by 45% relative to year 2000 levels
- Increase purchasing rate of recycled paper and environment-friendly paper to no less than 75%
- Achieve steel can recycling rate of at least 90%
- Continue zero emissions (final disposal rate of no more than 1%)
- Maintain 100% recycling rate; etc.

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

#### [Examples of efforts]

##### <Promoting the 3Rs>

- Maintain and improve heat efficiency of thermal power
- Reduce defective products by reviewing manufacturing processes
- Reduce manufacturing process loss by consolidating manufacturing bases

##### <Efforts to reduce environmental burden through product life cycles>

- Establish recovery and recycling routes to collect waste equipment and cable lines from clients
- Formulate guidelines for designing easy-to-recycle products

##### <Technology development and commercialization>

- R&D for technologies to recover resources from products
- Develop high-strength thin-wall material technologies

##### <Other>

- Cooperate with local governments in treating waste from natural disasters

- Develop thin-wall product packaging
- Accept waste from other industries
- Conduct thermal recycling
- Label products to indicate what materials they contain to facilitate waste segregation.
- Perform environmental assessment of equipment when deploying new equipment
- Implement demonstrative tests to turn food waste into biogas
- Develop process management systems using location information and images
- Measures to address issues concerning general waste from business activities; etc.

### III. Challenges to be addressed in the near future

#### Current status and challenges

- ◇ Our efforts to further reductions in the final disposal volume of waste are reaching their limits.
- ◇ The volume of waste and byproducts accepted by the cement industry, which has contributed to accepting waste from other industries, is reaching its capacity limits and has thus remained stagnant in recent years.
- ◇ Given the limited domestic availability of natural resources, Japan needs to promote further measures toward establishing a sound material-cycle
- ◇ As seen in SDG12 (sustainable consumption and production patterns the efficient use of natural resources and substantial reductions in waste volume are globally considered to be promising approaches.



Globally agreed sustainable development goals toward 2030

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



#### What we can do

- ◇ Keidanren will continue its efforts by promoting the Voluntary Action Plan for Establishing a Sound Material-Cycle Society.
- ◇ Given limited room for the further promotion of the 3Rs under current technological standards and laws, in particular, the Government must improve and review law administration and provide policy support. The utilization of AI and IoT, as well as the digitization of waste information promise to bear important roles.
- ◇ Keidanren will continue to urge the Government to realize a sound material-cycle society through regulatory reform and the digitization of waste management-related information by releasing requests for regulatory reform and follow-up survey results (compilation of requests from individual industries addressed to the Government and local governments).