Establishing a Sound Material-Cycle Society

Masao Yamada, Chairman
Subcommittee on Waste Management and Recycling

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Voluntary Action Plan for Establishing a Sound Material-Cycle Society —Results of Fiscal 2017 Follow-up—<Overview>

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)

(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
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)
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,
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.
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).
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
- Develop thin-wall product packaging
- Accept waste from other industries
- Conduct thermal recycling

**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
- 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.

**Technology development and commercialization**
- R&D for technologies to recover resources from products
- Develop high-strength thin-wall material technologies
- Monitor and implement demonstrating 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.

**Other**
- Cooperate with local governments in treating waste from natural disasters
- Continue zero emissions (final disposal rate of no more than 1%)
- Maintain 100% recycling rate; etc.
In March 2006, the Liaison Committee of Associations Promoting 3R, comprising eight containers and packaging recycling organizations formulated the “Voluntary Action Plan for promoting the 3Rs in Containers and Packaging” under which it has set up targets for each type of container or packaging and conducts annual follow-up surveys.

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<thead>
<tr>
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<th>2020 Target (Comparison from 2004)</th>
<th>Performance in 2016</th>
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<tbody>
<tr>
<td>Glass bottles</td>
<td>1.5% average weight saving per bottle</td>
<td>1.5% weight saving</td>
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<tr>
<td>PET bottles</td>
<td>25% average weight saving per bottle</td>
<td>23% weight saving</td>
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<tr>
<td>Paper containers and packaging</td>
<td>14% reduce</td>
<td>11.5% reduce</td>
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<td>Plastic containers and packaging</td>
<td>16% reduce</td>
<td>15.3% reduce</td>
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<td>Steel cans</td>
<td>8% average weight saving per can</td>
<td>7.7% weight saving</td>
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<td>Aluminum cans</td>
<td>5.5% average weight saving per can</td>
<td>5.1% weight saving</td>
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<tr>
<td>Beverage cartons</td>
<td>3% weight saving in 500 ml milk pack</td>
<td>2.5% weight saving</td>
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<tr>
<td>Cardboard boxes</td>
<td>6.5% average weight saving per m²</td>
<td>5.2% weight saving</td>
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