

The Method for Calculating the Steel Can Recycling Rate

Following is the method for calculating the steel can recycling rate.

Amount of Steel Can Consumption

Calculation Method

The weight of domestically produced steel cans shipped, weight of steel cans used for import/export of canned food and weight of steel cans imported as empty cans between January and December of 2012 were monitored based on the Ministry of Economy, Trade and Industry Statistics and "Japan Exports and Imports" from the Ministry of Finance, as well as the surveyed weight of steel cans.

Calculation Results (① + ② + ③ + ④) : 664,049 ton

- ① **Weight of domestically produced steel cans shipped : 544,635 tons**
 - Figures in tons from the Ministry of Economy, Trade and Industry Statistics were used for Beverage cans, food cans and general cans.
 - The weight of 18-liter cans is calculated by multiplying figures in tons from the Ministry of Economy, Trade and Industry Statistics by the (food) ratio announced by the National Federation of 18 Liter Cans Manufacturers Corporative Union.
- ② **The weight of steel cans used for exporting canned food : 1,408 tons**
 - Calculated based on "Japan Exports and Imports" from the Ministry of Finance.
- ③ **The weight of steel cans used for importing canned food : 113,471 tons**
 - Calculated based on "Japan Exports and Imports" from the Ministry of Finance. We assumed that the main types of cans used for manufacturing in Japan were used for food, tomatoes/vegetables and pet foods imported in "air-tight containers" (including not only cans but also other containers), and we estimated the number of cans and calculated the weight of containers by multiplying by the unit can weight.
 - Exported pet food cans: 17,402 tons (*Calculated based on the data from the Pet Food Manufacturers Association, Japan)
- ④ **Weight of steel cans imported as empty cans : 7,351 tons**
 - Figures in tons from "Japan Exports and Imports" from the Ministry of Finance.

Amount of steel can scrap collection

Calculation Method

- We assumed that 3 months elapses between the sale of steel can goods and the collection of the cans for recycling and we sent a survey form regarding usage amounts of scrap steel cans during the period from April 2012 to March 2013 to a total of 80 manufacturers including furnace manufacturers, blast furnace manufacturers, Pellet manufacturers, and casting manufacturers.
- In addition, we estimated, according to the survey data, the amount of steel cans for steelmaking raw materials recycled under the standard other than C Shredder through shredding process of iron scrap dealers across the country, and incorporated it into the subject calculation.
- We subtracted the weight of aluminum caps for beverage cans included in the scrap steel cans and foreign substances such as iron scraps except steel can from this total value.

Calculation Results (① - ② - ③) : 602,944 ton

- ① Weight of scrap steel cans used : 639,229 tons
- ② Weight of foreign substances such as aerosol cans, iron scrap included in ① above : 7,964 tons
- ③ Weight of aluminum lids for beverage containers included in ① above : 28,321 tons

The Steel Can Recycling Rate in FY2012

$$\frac{\text{Amount of steel can scrap collection (602,944 tons)}}{\text{Amount of Steel Can Consumption (664,049 tons)}} = 90.8\%$$

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Control panel with five horizontal bars (red, blue, green, grey, red) and a display area showing a bar chart and a legend with '4' and '3'.

Map of Japan with colored regions (purple, light blue, blue, green, orange, red) and surrounding data points represented by rounded rectangular boxes in various colors (blue, red, green, grey) containing small icons and text.

Activities of the Japan Steel Can Recycling Association (October 2012~September 2013)

■ Research

- October 2012 - September 2013: Field study on store collection and site collection
- April - September, 2013: Survey of consumer awareness
- April - September, 2013: Survey of steel can recycling conditions

■ Exhibited at events on environments in nationwide.

Performed promotion and PR for beautification and 3Rs.

- October 2012: "Environment Festival for Children in Chuo-ku"
- October 2012: "Toyama Environmental Fair in Toyama"
- October 2012: "Yamagata Environmental Fair in Yamagata"
- November 2012: "JFE West Japan Fair in Kurashiki"
- November 2012: "Yahata Festival Kigyosai in Fukuoka"
- November 2012: "Kagoshima Environmental Fair in Kagoshima"
- December 2012: "Eco-Products Exhibition 2012"
- May 2013: "JFE West Japan Fair in Fukuyama"
- June 2013: "Eco-Life Fair 2013"
- September 2013: "CAN ART Festival in Otaru"



Eco-Products Exhibition 2012

■ Practiced "Campaigns for Anti-Littering and Beautification"

- October 2012 in Chino, May 2013 in Obihiro, June 2013 in Matsue
- Performed 490 times at 349 sites in total 41 years from 1973 till September 2013



Practiced "Campaigns for Anti-Littering and Beautification" in Matsue

■ Held "Seminar on Various Collection System for Recyclables"

- February 2013 in Osaka
- April 2013 in Yokohama

■ Performed "Excursion at Steel Plants"

- November 2012: Members of citizens' group in Shibuya visited "JFE Steel Corporation East Japan Works & Chiba Prefectural Sewerage Management Public Corporation Hanamigawa Wastewater Treatment Plant"
- November 2012: Saitama Prefectural Public Cleansing Administration Research Council visited "JFE Steel Corporation East Japan Works & Chiba Biogas Center in Japan Recycling Corporation"
- August 2013: Pupils living in Chuo-ku visited "Nippon Steel & Sumitomo Metal Corporation Kimitsu Works"

■ Supported elementary and junior high schools for practicing environmental education

- January 2013: Commended and Supported 45 elementary & junior high schools

■ Supported groups practicing group collection

- January 2013: Commended and Supported 58 groups contributing group collection of steel can

■ Held "Poster Contest on Steel Cans Recycling"

- January 2013: Commended 45 school children

■ Published periodicals etc. and distributed to nationwide

- February 2013: PR magazine "Steel Can Age vol.29"
- August 2013: PR magazine "Steel Can Age vol.30"
- August 2013: PR poster "Beautiful Japan, what we want to leave recycling for future"

■ Others

- October 2012: Published "Annual Report on Steel Can Recycling 2012"
- October 2012: Held "Press briefing" at Tekko Kaikan
- May 2013: Provided garbage bags to support regional cleaning activities on "Zero Garbage DAY"
- Practiced delivery sessions, lectures and invited for lecture (on demand)
- Practiced join projects to promote 3Rs of recycling containers and packaging by the Liaison Committee of Associations Promoting 3Rs

Promoting efforts toward partnership among the actors for making recycling society