



## IV Group Collection of Steel Cans

# 1. How Many Municipalities Practice Group Collection?

### About 80% of Municipalities Practice Group Collection Programs

The rate of municipalities involvement in group collection, all forms included is 81.9%. This would probably be higher if resource collections performed privately were included. By population, cities with population more than 500,000 have the highest implementation rate (100.0%). By regions, group collection was practiced in more than 80% of municipalities except Hokuriku, Shikoku and Kyushu/Okinawa regions.



People are sorting recyclable wastes

### The Rate of Practicing Group Collection

81.9% of municipalities are practicing group collection, and about 80% of them are involving in the system to some extent.

	FY2012		FY2010		FY2008	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Practice	603	81.9	561	79.7	593	80.7
Do not practice	94	12.8	113	16.1	111	15.1
Unknown	39	5.3	30	4.3	27	3.7
Others	0	0.0	0	0.0	4	0.5
Total	736	100.0	704	100.0	735	100.0

Note. [Do not practice] and [Unknown] include municipalities that have no information because group collection is performed privately.

### The Rate of Practicing Group Collection according to the Scale of Population in FY2012

In large cities where more than 500,000 people reside, the ratio of practicing group collection (=participation of municipalities) is 100%, however, the trend indicates that the ratio gets lesser in smaller cities.

	Practice		Do not practice		Unknown		Total	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Less than 30,000	37	58.7	17	27.0	9	14.3	63	100.0
30,000 ~ 50,000	117	74.1	25	15.8	16	10.1	158	100.0
50,000 ~ 100,000	204	85.0	29	12.1	7	2.9	240	100.0
100,000 ~ 200,000	131	87.3	15	10.0	4	2.7	150	100.0
200,000 ~ 300,000	41	89.1	4	8.7	1	2.2	46	100.0
300,000 ~ 500,000	42	87.5	4	8.3	2	4.2	48	100.0
More than 500,000	31	100.0	0	0.0	0	0.0	31	100.0

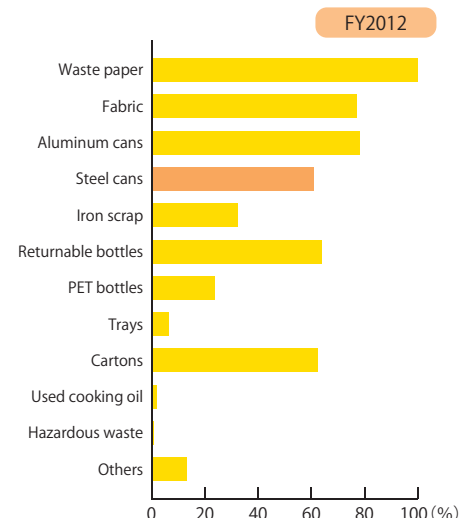
### Target Item for Group Collection (multiple answers)

The ratio of municipalities that designate steel cans for group collection 61.0%. The ratio of other items remains the same, but steel cans and trays are increasing gradually.

	FY2012		FY2010		FY2008	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Waste paper	602	99.8	557	99.3	586	98.8
Fabric	465	77.1	437	77.9	459	77.4
Aluminum cans	471	78.1	440	78.4	475	80.1
Steel cans	368	61.0	328	58.5	329	55.5
Iron scrap	195	32.3	174	31.0	174	29.3
Returnable bottles	385	63.8	357	63.6	373	62.9
PET bottles	143	23.7	114	20.3	100	16.9
Trays	39	6.5	24	4.3	20	3.4
Cartons	376	62.4	282	50.3	—	—
Used cooking oil	12	2.0	—	—	—	—
Hazardous waste	6	1.0	—	—	—	—
Others	81	13.4	87	15.5	158	26.6
Total	603	100.0	561	100.0	593	100.0

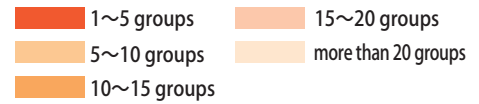
Note1. [Others] indicates plastic containers for beer, mixed paper, plastic items, etc.

Note2. [Used cooking oil] and [Hazardous waste] are added since FY2011

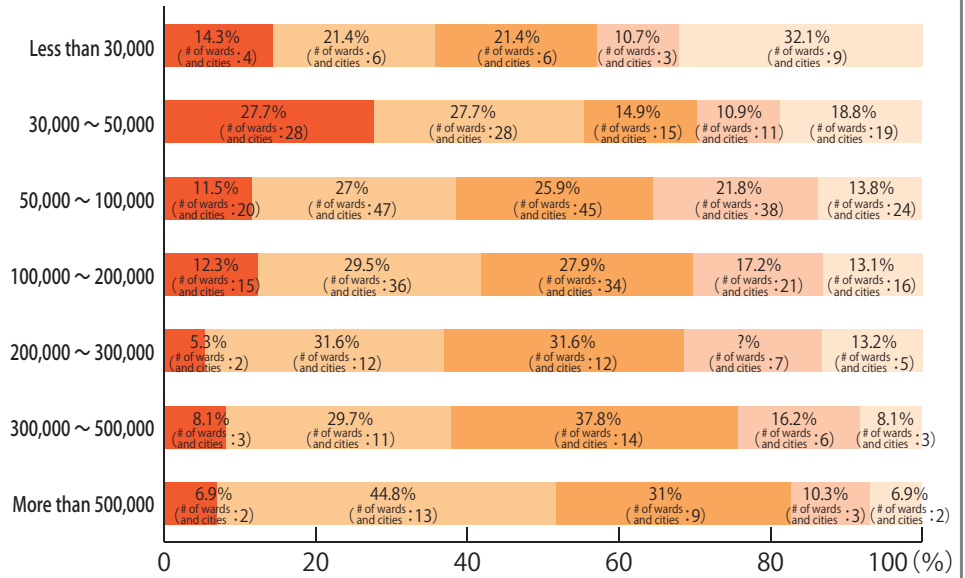


## Number of Groups Practicing Group Collection according to the Scale of Population per 10,000 in FY2012

According to the size of the population, the number of groups is inverse relation to population level as it shown that population less than 30,000 have the highest number of practicing groups.



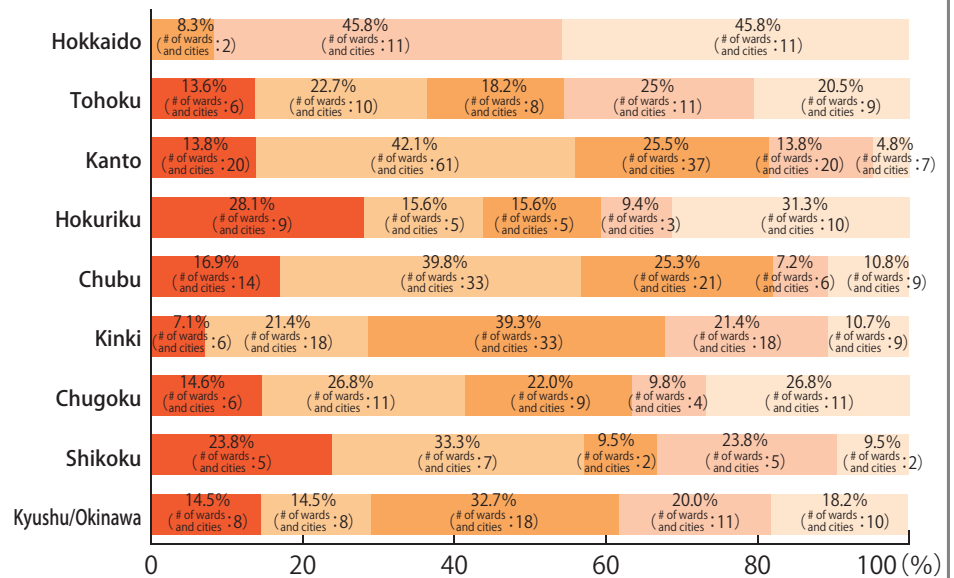
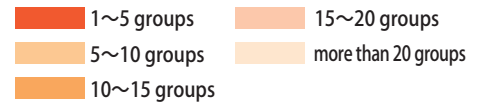
	Average practicing groups
Less than 30,000	18.7
30,000 ~ 50,000	12.5
50,000 ~ 100,000	13.3
100,000 ~ 200,000	12.6
200,000 ~ 300,000	12.8
300,000 ~ 500,000	12.2
More than 500,000	10.9



## Number of Groups Practicing Group Collection per 10,000 by Region in FY2012

The average number of groups practicing group collection per 10,000 by region indicates that the highest quantity is in Hokkaido (23.2 groups) on the other hand, the lowest in Kanto and Shikoku. Especially in Hokkaido, majority of groups practicing group collection are groups above 15.

	Average practicing groups
Hokkaido	23.2
Tohoku	15.8
Kanto	10.6
Hokuriku	13.7
Chubu	12.2
Kinki	13.7
Chugoku	14.2
Shikoku	10.5
Kyushu/Okinawa	14.9



### COLUMN

## 4

## Issue on Carrying Away of Recyclable Waste

In late years, recyclable wastes are carried away from a personal site and accumulation place of the group collection without permission occur frequently. In Yokohama City Council revised the regulation on May 2012 to regulate carrying away of recyclable waste from group collection. It enforces the rule of the regulations to prohibit carrying away of recyclable waste. Carrying away business is expanding systematically, and so "criminal charge" has applied, instead of tax to punish, to both employee and employer. However, the enforcement is still weak and limited therefore, it is necessary for each sectors: public, private and government to cooperate more effectively to prevent this case.

(Written by Kohei Yamamoto, Managing Director of Dynax Urban Environment Research Institute)



## IV Group Collection of Steel Cans

### 2. How Do Municipalities Participate in Group Collection?

#### Participating Conditions of Municipalities toward Group Collection (multiple answers)

As the supporting measures by municipalities, more than 90% of them granted are financial incentives for practicing group, followed by PR (43.5%) and subsidies to collecting companies (25.6%).

	FY2012		FY2010		FY2008	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Provide grants	567	94.0	529	94.3	553	93.3
PR	153	43.5	259	46.2	242	40.8
Provide subsidies	90	25.6	154	27.5	166	28.0
Appeal to citizens	142	23.5	125	22.3	125	21.2
Provide equipments	24	6.8	60	10.7	58	9.8
Coordination	40	11.4	46	8.2	47	7.9
Others	20	3.3	13	2.3	18	3.0
Unknown	15	2.5	12	2.1	22	3.7
<b>Total</b>	<b>603</b>	<b>100.0</b>	<b>561</b>	<b>100.0</b>	<b>593</b>	<b>100.0</b>

#### Grants to Practicing Groups for General Recyclables

¥3-5/kg is the highest ratio recording 35.3%. By regions, the ratio in Kanto is relatively high recording more than ¥6/kg in average.

	FY2012		FY2010		FY2008	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Less than ¥3/kg	105	18.5	105	19.8	113	20.4
¥3~¥5/kg	200	35.3	172	32.5	167	30.2
¥5~¥7/kg	131	23.1	125	23.6	138	25.0
¥7~¥10/kg	73	12.9	56	10.6	58	10.5
More than ¥10/kg	21	3.7	25	4.7	21	3.8
Unknown	37	6.5	46	8.7	56	10.1
<b>Total</b>	<b>567</b>	<b>100.0</b>	<b>529</b>	<b>100.0</b>	<b>553</b>	<b>100.0</b>

Note. [Total] indicates the number of wards and cities providing financial aids toward groups.

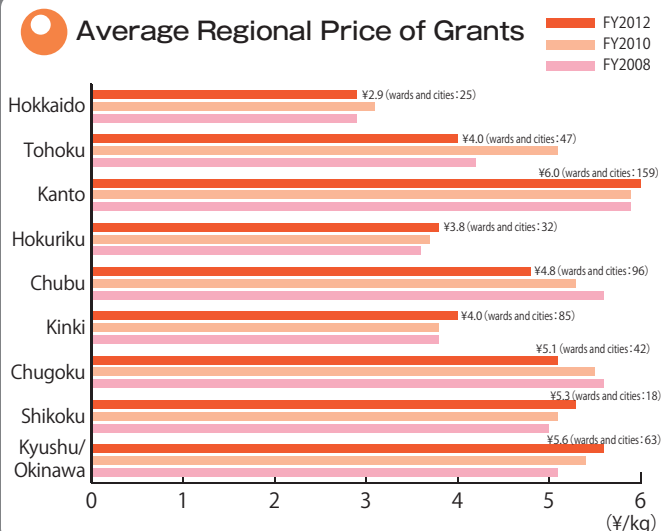
#### Subsidies to Collecting Companies for General Recyclables

Less than ¥3/kg is more than half. By regions, the ratio in Kanto, Chugoku and Kyushu/Okinawa are relatively high.

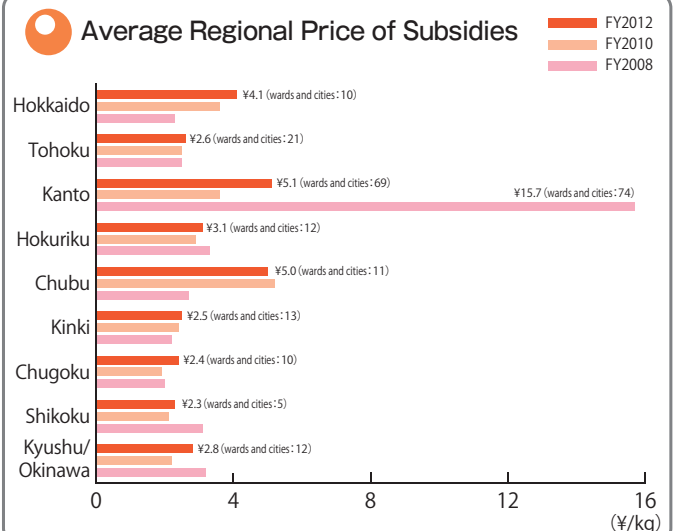
	FY2012		FY2010		FY2008	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Less than ¥3/kg	84	51.5	80	51.9	87	52.1
¥3~¥5/kg	30	18.4	29	18.8	40	24.0
¥5~¥7/kg	12	7.4	13	8.4	11	6.6
¥7~¥10/kg	6	3.7	3	1.9	3	1.8
More than ¥10/kg	6	3.7	6	3.9	5	3.0
Unknown	25	15.3	23	14.9	21	12.6
<b>Total</b>	<b>163</b>	<b>100.0</b>	<b>154</b>	<b>100.0</b>	<b>167</b>	<b>100.0</b>

Note. [Total] indicates the number of wards and cities providing financial aids toward companies.  
Note2. It does not show the average price since calculation system is varied in each municipality.

#### Average Regional Price of Grants



#### Average Regional Price of Subsidies



## Grants for Steel Cans

¥3-5/kg is the highest ratio recording 34.3%, and it is increasing

	FY2012		FY2010		FY2008	
	# of wards and cities	rate (%)	# of wards and cities	rate (%)	# of wards and cities	rate (%)
Less than ¥3/kg	27	13.4	25	13.1	30	15.7
¥3~¥5/kg	69	34.3	55	28.8	60	31.4
¥5~¥7/kg	59	29.4	74	38.7	60	31.4
¥7~¥10/kg	25	12.4	21	11.0	26	13.6
More than ¥10/kg	21	10.5	16	8.4	15	7.9
<b>Total</b>	<b>201</b>	<b>100.0</b>	<b>191</b>	<b>100.0</b>	<b>191</b>	<b>100.0</b>

Note. [Total] indicates the number of wards and cities providing financial aids for steel cans.

## Subsidies for Steel Cans

Less than ¥3/kg is the highest ratio recording 51.3%, and the ratio of ¥5-7/kg is also increasing.

	FY2012		FY2010		FY2008	
	# of wards and cities	rate (%)	# of wards and cities	rate (%)	# of wards and cities	rate (%)
Less than ¥3/kg	20	51.3	13	37.1	23	53.5
¥3~¥5/kg	10	25.6	11	31.4	10	23.3
¥5~¥7/kg	6	15.4	6	17.1	4	9.3
¥7~¥10/kg	1	2.6	2	5.7	2	4.7
More than ¥10/kg	2	5.1	3	8.6	4	9.3
<b>Total</b>	<b>39</b>	<b>100.0</b>	<b>35</b>	<b>100.0</b>	<b>43</b>	<b>100.0</b>

Note. [Total] indicates the number of wards and cities providing financial aids for steel cans.

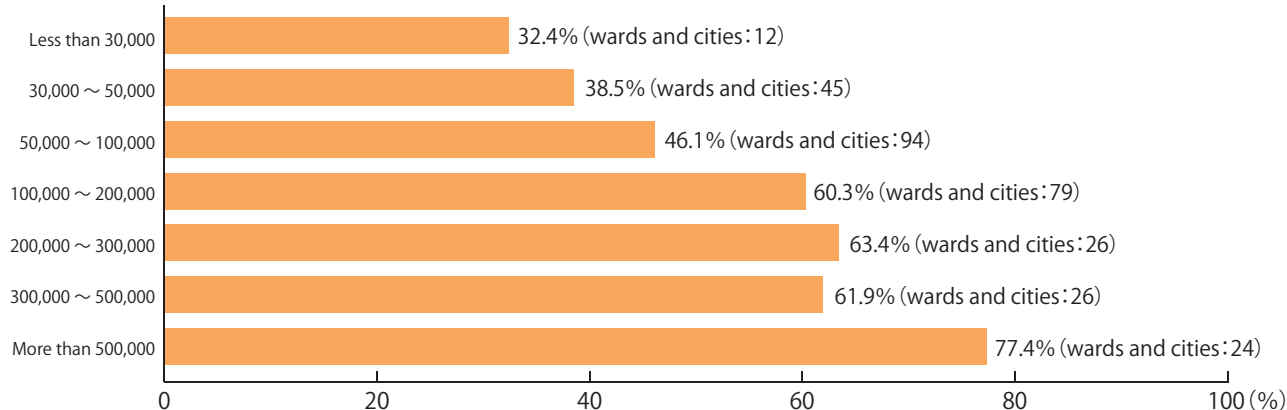
## Reasons for Promoting Group Collection (multiple answers)

The most common reason is raising environmental awareness at 79.3%, followed by increasing disposal opportunity (51.1%) and revitalizing communities (50.7%).

	FY2012	
	# of wards and cities	rate(%)
Raise environmental awareness	478	79.3
Increase disposal opportunity	308	51.1
Revitalize communities	306	50.7
Cut costs for sorted collection	207	34.3
Manage among private sector as much as possible	42	7.0
Others	41	6.8
Unknown	55	9.1
<b>Total</b>	<b>603</b>	<b>100.0</b>

## Distribution of Municipalities Answered "Revitalize Communities"

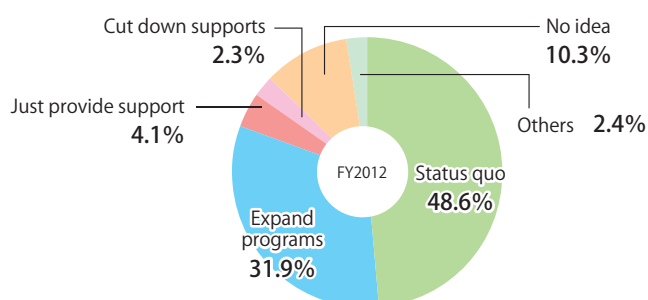
Looking at the results by population, cities with larger populations have a high ratio in revitalizing communities. Cities of over 50,000 marked 77.4%, in contrast to 32.4% by cities of less than 30,000. Cities with higher populations have a high ration in conducting group collection as a means to revitalize the community. Results of interviews also show many municipalities in urban areas are using group collection for community revitalization reflecting the fragility of the community system.



Note. Denominator is the number of wards and cities in each pop

## Plans for the Future

Approximately half of municipalities are in status quo, it means they consider that current measures are capable of recycling. Moreover, around 30% of municipalities answered that they are willing to expand programs. It shows they are focusing on group collection.





## IV Site Collection of Steel Cans

### 3. How Do Municipalities Participate in Store Collection?

There are two cases for store collection at retailers: one is voluntary collection by store, and the other is a case where the administration is involved in some way. The store collection is held as a part of retailer's CSR business, it is becoming an essential source in waste collection system.

#### Implementation of Store Collection (multiple answers)

17.7% of municipalities are working with retailers to implement store collection. However, many of municipalities do not implement / understand what retailers collect or manage.

	FY2012	
	# of wards and cities	rate(%)
Retailer implement store collection by own	306	41.6
Retailer cooperate with municipalities	130	17.7
No Implementation	60	8.2
No Grasp	288	39.1
Unknown	43	5.8
<b>Total</b>	<b>736</b>	<b>1000.0</b>

#### Implementation of Store Collection by Region

Result shows that "retailers implement store collection by own" is higher rate than "retailers cooperate with municipalities". The high rate of implementation of store collection by region is 46.8% & 31.9% in Hokuriku area but the implementation rate in Chugoku and Kyushu-Okinawa area are quite low. Kanto also holds high rate of implementing store collection especially for the PET bottle under the Tokyo Rule III.

	Retailer implement store collection by own		Retailer cooperate with municipalities		No Implementation		No Grasp	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Hokkaido (34)	13	38.2	6	17.6	3	8.8	13	38.2
Tohoku (62)	31	50.0	5	8.1	4	6.5	22	35.5
Kanto (184)	71	38.6	46	25.0	14	7.6	69	37.5
Hokuriku (47)	22	46.8	15	31.9	1	2.1	16	34.0
Chubu (118)	60	50.8	21	17.8	8	6.8	43	36.4
Kinki (101)	44	43.6	15	14.9	9	8.9	36	35.6
Chugoku (50)	25	50.0	5	10.0	4	8.0	17	34.0
Shikoku (36)	9	25.0	2	5.6	6	16.7	19	52.8
Kyushu/Okinawa (104)	31	29.8	15	14.4	11	10.6	53	51.0

Note: inside ( ) indicates the number of municipalities in each district.

#### Target Items for Store Collection (multiple answers)

Major materials gathered at store collection are Trays (80.7%) and Milk cartons (71.6%) by retailers own whereas PET bottles (76.9%) is collected cooperatively (municipalities and retailers). Store collection is able to cover a broad range of materials. "Others" include used cooking oil, ink cartridge, PET bottle cap.

	Retailer implement store collection by own		Retailer cooperate with municipalities	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Newspaper	96	31.4	27	20.8
Waste paper	92	30.1	26	20.0
Cardboard	76	24.8	21	16.2
Fabric	14	4.6	9	6.9
Aluminum cans	175	57.2	45	34.6
<b>Steel cans</b>	<b>136</b>	<b>44.4</b>	<b>33</b>	<b>25.4</b>
Metals	2	0.7	1	0.8
Returnable bottle	63	20.6	25	19.2
PET bottle	206	67.3	100	76.9
Trays	247	80.7	69	53.1
Milk cartons	219	71.6	75	57.7
Small household appliances	11	3.6	5	3.8
Hazardous waste	55	18.0	34	26.2
Others	55	18.0	26	20.0
Unknown	24	7.8	1	0.8
<b>Total</b>	<b>306</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>

#### Recycling route for store collection (multiple answers)

More than half of store collections which retailer cooperate with municipality are collected either municipalities or private sectors. However, in case of retailer implement store collection by own, more than half of municipalities have no grasp of recycling route.

	Retailer implement store collection by own		Retailer cooperate with municipalities	
	# of wards and cities	rate(%)	# of wards and cities	rate(%)
Collected by Private Sector	96	31.4	62	47.7
Collected by Municipality	43	14.1	69	53.1
Apply return delivery transportation	22	7.2	9	6.9
No Grasp	174	56.9	25	19.2
Others	5	1.6	8	6.2
Unknown	31	10.1	12	9.2
<b>Total</b>	<b>306</b>	<b>100.0</b>	<b>130</b>	<b>100.0</b>