

**Explanations by Industry (Retail Industry) for the Basic  
Guidelines on Accounting for Greenhouse Gas Emissions  
Throughout the Supply Chain, Ver. 1.0**

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Japan Chain Stores Association  
Japan Department Stores Association  
Japan Franchise Association

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## **Part 1. Basic Approach of Accounting**

### **1. Background and role of this document**

#### **1.1 Background**

As a measure against global warming, presently in Japan, companies meeting certain criteria are accounting for and reporting their own greenhouse gas emissions, and national and regional government organizations are publicly disclosing their emissions data, in accordance with the Mandatory Greenhouse Gas Accounting and Reporting System (referred to below as the "Accounting and Reporting System") based on the Act on Promotion of Global Warming Countermeasures (referred to below as the "Global Warming Countermeasures Act") as well as various programs based on certain regional ordinances. In addition, many businesses are voluntarily disclosing data on their own emissions in reports on corporate social responsibility (CSR), and growing number of companies are taking steps to determine and reduce their own emissions. Meanwhile, the scope of emissions determined under the existing Accounting and Reporting System, CSR reporting, and the like is generally limited to the reporting company's own emissions, and therefore, contributions made through energy-saving products and the spread of products with lower greenhouse gas emissions are not reflected when companies evaluate their own emissions. The business activities of companies are linked through purchasing and sales in the supply chain; and although this may involve a great deal of potential for reducing emissions, when companies determine only their own emissions, the potential for such reduction is not clarified and there are no incentives for taking action to reduce emissions through supply chain management. Therefore, in the determination and management of emissions, it is important to determine not only the reporting company's own emissions but also greenhouse gas emissions in the supply chain (referred to below as "supply chain emissions").

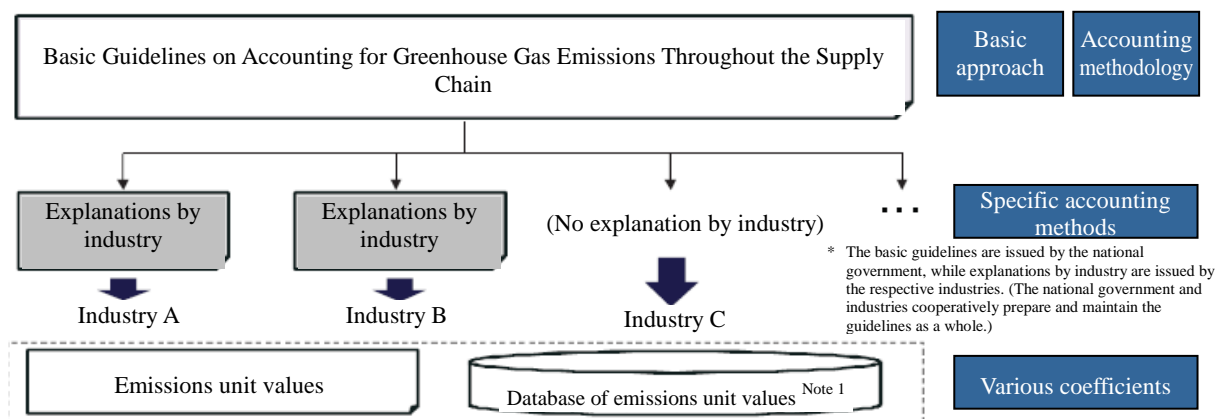
Consequently, a decision was made to develop accounting guidelines for supply chain emissions in Japan in order to promote efforts to manage supply chain emissions by providing supply chain emissions accounting methods that are easy for Japanese companies to use.

#### **1.2 Role**

This document constitutes a portion of the supply chain emissions accounting guidelines to be developed in Japan. It provides explanations for the retail industry, based on the Basic Guidelines which are intended for all industries. This document has been prepared on the basis of the Basic Guidelines on Accounting for Greenhouse Gas Emissions Throughout the Supply Chain, Ver. 1.0.

It describes the scope of emissions accounting by the retail industry, accounting methods for use by this industry, and important points for consideration with regard to accounting, including specific examples.

For the overall structure of the guidelines and the role of this document, please refer to the figure below.



Note 1: These guidelines indicate related emissions unit values, but each company may decide whether or not to use them.

Fig. 1.2-1 Overall structure of the guidelines and role of this document

### 1.3 Preparation of this document

This document was studied and prepared by the following participants in the Retail Working Group (WG) under the Study Group on Greenhouse Gas Emissions in the Supply Chain, established by the Ministry of the Environment and the Ministry of Economy, Trade and Industry.

[WG Members:]

- Tadayuki Masui, Professor, Tokyo City University (Chair)
- Japan Chain Stores Association
- Japan Franchise Association
- Japan Department Stores Association

[Observers:]

- Ministry of the Environment
- Ministry of Economy, Trade and Industry

### 1.4 Relationship between the retail industry and supply chain emissions

In the retail industry, efforts have been focused primarily on the reporting company's stores and logistical operations managed by the reporting company. However, as purchasers located on the downstream side of the supply chain as well as sellers who deal directly with consumers, retailers are in a position to influence the entire supply chain, as detailed below.

- Selection of products to be sold: Approaching manufacturers about products that should be sold, instead of only retailing the existing products of manufacturers.
- Selection of materials: Selecting materials that are desirable in terms of the environment (greenhouse gas emissions).

- Selection of transportation methods: Promoting green logistics, including optimizing the timing and lots of stock purchasing, using joint transportation, and designating the types of vehicles for transport, etc.
- Selection of products for purchasing: Recommending products that are desirable in terms of the environment (greenhouse gas emissions, etc.) to consumers.
- Selection of purchasing methods: Recommending purchasing methods (using public transportation, refusing plastic shopping bags, etc.) that are desirable in terms of the environment (greenhouse gas emissions, etc.) to consumers.
- Recommendations on how to use products: Recommending methods of using products (ways of storing food products, "Warm Biz" energy-saving campaign, etc.) that are desirable in terms of the environment (greenhouse gas emissions, etc.) to consumers.
- Recommendations on how to dispose of products: Recommending product disposal methods (collection of clothing and shoes at stores for recycling, etc.) that are desirable in terms of the environment (greenhouse gas emissions, etc.) to consumers.

The retail industry may not be able to exert a major influence in some of these areas since these are under the direct control of other parties, unlike the scope of existing efforts such as a reporting company's own stores. However, the expectation is that companies will engage in active efforts to address the supply chain as a whole.

## 2. Use and scope of application of this document

### 2.1 Scope of application

This document provides explanations concerning business activities of the retail industry. Here, the retail industry is defined as follows, in accordance with the definition under the Japan Standard Industrial Classification:

1. The retail trade refers to places of business that engage in the following areas of business:
  - (1) Selling products for individual or household consumption
  - (2) Selling products to industrial users in small amounts in terms of physical volume or monetary value.

Source: Japan Standard Industrial Classification (revised in November 2007)

The explanations in this document are generally aimed at companies that sell food products, general merchandise, etc., under part (1) of the above definition.

For companies that engage in business activities other than retail, those activities are not covered by this explanation.

The circumstances and views of the following three business types have been taken into consideration in the preparation of this explanation, and individual explanations have been added for each business type in cases where differences exist among the respective business types.

- Supermarkets and mass retailers (Japan Chain Stores Association)
- Department stores (Japan Department Stores Association)
- Franchise chain stores (Japan Franchise Association)

### 2.2 How to use this document

Companies should refer to both the Basic Guidelines and this document when calculating supply chain emissions. The scope of this explanation is shown in Table 2.2-1. The movement of customers is included as part of the transportation and distribution (downstream) category. However, since it requires explanation as an item that is particularly important in the calculation of supply chain emissions in the retail industry, it is treated as an independent item in this document. For an explanation concerning the categories, please refer to section 4.2. Explanations by industry type are also included, so in cases of differences in content depending on the type of retail, please refer to the applicable portions of the most similar industry type, as needed.

Table 2.2-1. Scope of this explanation

Division	Category	Covered in this explanation
Emissions of reporting company		
	Direct emissions (Scope 1)	Yes (1.1)
	Energy-derived indirect emissions (Scope 2)	Yes (1.2)

Other indirect emissions (Scope 3)			
Upstream	1	Purchased goods and services	Yes (2.1)
	2	Capital goods	Yes (2.2)
	3	Fuel and energy related activities not included in Scope 1 or 2	
	4	Transportation and delivery (upstream)	Yes (2.3)
	5	Waste generated in operations	Yes (2.4)
	6	Business travel	
	7	Employee commuting	
	8	Leased assets (upstream)	
Downstream	9	Transportation and delivery (downstream)	Yes (2.5) Customer movement (2.6)
	10	Processing of sold products	
	11	Use of sold products	Yes (2.7)
	12	End-of-life treatment of sold products	Yes (2.8)
	13	Leased assets (downstream)	
	14	Franchises	Yes (2.9)
	15	Investments	
		Other	

Note) Covered categories are identified with "Yes." Numbers in parentheses indicate the outline sections in Part 2.

For the emissions unit values needed for calculations, please refer to the "Report on Emissions Unit Values for Calculation of Greenhouse Gas Emissions, etc., by Organizations Throughout the Supply Chain" (abbreviated below as "Report on Emissions Unit Values") and the separate database of emissions unit values.

### **3. Purpose of accounting and using the results of accounting**

The purpose of performing supply chain emissions accounting in the retail industry could include the following.

- To obtain a deeper understanding of the current situation of the reporting company's supply chain emissions and take steps to reduce supply chain emissions.
- To obtain an indicator that can contribute to the resolution of various management issues in collaboration with suppliers by visualizing the current state of the reporting company's supply chain, including environmental measures, cost savings, a stronger supply chain, and risk reduction.
- To find ways to reduce emissions in cooperation with consumers (customers) and improve communication with consumers (customers).
- To disclose the reporting company's emissions in order to build understanding among investors, consumers (customers), community residents, and other stakeholders.

The results of emissions accounting could be used in a variety of ways. Because many issues related to comparisons among businesses still need to be addressed, the anticipated uses at the present stage are as follows.

- Determining the scale of the reporting company's emissions and identifying emissions to be targeted for reduction
- Determining changes in the reporting company's emissions over time and confirming the progress of measures taken by the company to reduce emissions
- Disclosing the reporting company's emissions to build understanding among investors, consumers, community residents, and other stakeholders

It is important to address this in a stepwise manner according to the purpose and use, such as proceeding in the order of the items listed above.

Here, considering that consumers choose whether to buy products, one possible approach would be to provide information to consumers (customers) concerning the environmental burden of each product; but it is important to provide an overall picture from the standpoint of showing consumers the stance of commitment taken by the company.

Concerning the first and second points above, it is anticipated that various insights that can be used in measures for reducing emissions will be gained not only from the results of accounting but also through the accounting process.

Changes in the scale of a company's business, such as increases in the number of stores, lead to changes in supply chain emissions. One way to evaluate progress in efforts to control emissions in a way that is commensurate with a company's growth would be to evaluate emissions in terms of unit values, in addition to simply looking at total emissions.

For example, the following methods could be used. However, this does not necessarily limit the indices to be used for this purpose, since these should be established in accordance with their purpose and the actual business circumstances.



Table 3.1-1. Indices for evaluation of emissions in the supply chain (examples)

Example of evaluation index	Advantages	Disadvantages
GHG emissions / Sales volume	Suitable for evaluating management efficiency. Consistent with the approach that the scope of accounting is the scope recorded as sales.	Sales volumes tend to fluctuate based on commodity prices, economic conditions, etc.
GHG emissions / (Total store floor area x Operating hours)	Suitable for evaluating efficiency of energy consumption (GHG emissions) per amount of operations at stores.	Some aspects of store operation are difficult to quantify, such as the use of capital goods and transported, delivered, and sold products. Also, since increased scale and expanded operating hours are related to decreases in consumption rates, this may not lead to substantive reductions.
GHG emissions / Amount of products sold	Suitable for evaluating management efficiency in cases where there is a limited number of products and sales volume can be determined in terms of physical quantities (such as weight).	Difficult to use for determining sales volume if there is a wide range of products.

**4. Scope of accounting**

**4.1 Organizational boundaries**

As a general rule, the organizational boundaries for accounting by a reporting company consist of all business activities owned or controlled by the reporting company, including those of the reporting company (corporation, etc.) and companies subject to consolidation, etc.

Member stores of a franchise chain (excluding stores falling under Scope 1 or 2 as directly managed stores and subsidiaries, etc., of the reporting company) are not included in the scope of accounting by the reporting company. However, their emissions are subject to reporting as a part of supply chain emissions.

**4.2 Activities subject to accounting**

The activities subject to accounting as supply chain emissions are classified under the following three general scopes, and Scope 3 is further subdivided into fifteen categories.

- Scope 1: Direct greenhouse gas emissions by the reporting company itself.
- Scope 2: Indirect emissions from the use of electricity, heat, or steam supplied by others.
- Scope 3: Other indirect emissions besides Scope 2 (Emissions by others related to the company's activities).

The content of each category is as follows. The explanations given in the Basic Guidelines have been partially revised for the retail industry.

Table 4.2-1. Categories

Division	Category	Emissions subject to accounting	
Emissions of reporting company			
	Direct emissions (Scope 1)	Direct emissions from the use of fuel and industrial processes by the reporting company	
	Energy-derived indirect emissions (Scope 2)	Indirect emissions from the use of electricity and heat purchased by the reporting company	
Other indirect emissions (Scope 3)			
Upstream	1	Purchased goods and services	Emissions from activities up to manufacturing of raw materials, parts, purchased goods, sales-related materials, etc.
	2	Capital goods	Emissions from construction and manufacturing of the reporting company's capital goods (stores, and facilities and equipment in stores)
	3	Fuel and energy related activities not included in Scope 1 or 2	Emissions from procurement of fuel used in power generation, etc., for electricity and heat procured from other companies
	4	Transportation and delivery (upstream)	Emissions from distribution of raw materials, parts, purchased goods, sales-related materials, etc. up to delivery to the reporting company
	5	Waste generated in operations	Emissions from transportation and processing of waste generated by the reporting company's stores, etc.

	6	Business travel	Emissions from business travel by employees
	7	Employee commuting	Emissions from transportation of employees when commuting to and from the place of business
	8	Leased assets (upstream)	Emissions from operation of assets leased to the reporting company (excluded if calculated under Scope 1 or 2)
Downstream	9	Transportation and delivery (downstream)	Emissions from transport, storage, cargo handling, and retail sales of products; movement of consumers to stores
	10	Processing of sold products	(Emissions from processing of intermediate products by the reporting company)
	11	Use of sold products	Emissions from use of products by users (consumers)
	12	End-of-life treatment of sold products	Emissions from transportation and processing of products upon disposal by users (consumers)
	13	Leased assets (downstream)	(Emissions from operation of assets leased to others)
	14	Franchises	Scope 1 and 2 emissions from franchise members
	15	Investments	(Emissions from operation of investments)
		Other	Emissions from daily lives of employees and consumers

Decisions as to which scope to select for accounting are made on reasonable grounds in accordance with the business format of each company and the purpose of accounting, etc. There may be various purposes of accounting, including reduction of supply chain emissions, use as an indicator for the resolution of important management issues (e.g. cost savings and risk reduction), and use in communication to promote collaboration with consumers for the reduction of emissions. The table below identifies the categories that are considered advisable for priority determination for each of these purposes in relation to the retail trade of food products and general merchandise, etc.<sup>1</sup>

The scope of accounting in this explanation has been set with consideration for the relative priority of each category when the purpose is reduction of supply chain emissions, as well as the unique characteristics of the retail industry (whether explanations are needed in relation to the Basic Guidelines). (See Table 2.2-1.)

Table 4.2-2. Priority categories for the retail industry and relationship to the retail industry

Division	Category	Relationship to retail industry	Priority level by purpose of accounting (examples)		
			Reducing supply chain emissions	Use as management indicator	Communication with consumers
Emissions of reporting company					
	Direct emissions (Scope 1)	Emissions at stores; directly manageable by energy conservation, etc.	S	S	-
	Energy-derived indirect emissions (Scope 2)	Emissions at stores; directly manageable by saving electricity, etc.	S	S	-

<sup>1</sup> From the standpoint of increasing transparency, ensuring accountability, and improving the company's image, all of the categories are considered to be important.

Other indirect emissions (Scope 3)						
Upstream	1	Purchased goods and services	Emissions by suppliers; addressable by working with suppliers for energy conservation, green procurement, reduction of register receipts, etc.	PB: A or B; Not PB: C	A	-
	2	Capital goods	Emissions by suppliers of capital goods; addressable through selection of materials, construction methods, etc.	B	A	-
	3	Fuel and energy related activities not included in Scope 1 or 2	Upstream emissions by electric power companies, etc.; somewhat addressable through selection of suppliers for electricity, etc.	B	B	-
	4	Transportation and delivery (upstream)	Emissions by freight shipping companies; addressable through optimization of ordering methods, selection of transport companies, etc.	A	A	-
	5	Waste generated in operations	Emissions by waste disposal operators; addressable through optimization of waste separation and processing methods	A	A	-
	6	Business travel	Emissions by transportation companies; may be addressable through selection of means of transportation, etc., depending on the routes.	C	C	-
	7	Employee commuting	Emissions by employees (or transportation companies); may be addressable through selection of means of transportation, etc., depending on the routes.	C	C	-
	8	Leased assets (upstream)	(In some cases) Emissions by leasing companies; may be addressable by optimizing usage methods of leased assets.	C	C	-
Downstream	9	Transportation and delivery (downstream)	Emissions by freight shipping companies; addressable in some cases by recommending transport companies to customers.	B	C	B
		Movement of consumers	Addressable in some cases by recommending means of transportation to stores to customers.	B	C	A
	10	Processing of sold products		-	-	-
	11	Use of sold products	Emissions by users; addressable in some cases by recommending energy-efficient products to users	C	C	A

	12	End-of-life treatment of sold products	Emissions by waste disposal operators; addressable in some cases through selection of means of disposal, etc.	Collected: A; Other: C	C	B
	13	Leased assets (downstream)		-	-	-
	14	Franchises	Emissions by franchise members; addressable through equipment development and selection, etc., by the head office	A	A	-
	15	Investments		-	-	-
		Other	Support could be provided for measures in the daily lives of consumers	Voluntary		

Notes:

- \* PB: Private brand
- \* Collected: Wastes collected by the reporting company

Legend:

- Reducing supply chain emissions
  - S: Category that should be the highest level of priority in accounting by retail companies.
  - A: Category that can be determined at the retail company's own responsibility and should be an accounting priority because there is significant potential for active measures to reduce emissions.
  - B: Category that is desirable to include in accounting although determination may be difficult, because there is significant potential for future determination and reduction efforts based on further study of accounting methods; or a category that can be determined but is not a high priority for accounting because there is low potential for reduction.
  - C: Category that is a low priority for accounting because determination and management would be difficult at the present time.
  - : No applicable activities exist.
  
- Use as management indicator
  - S: Category that should be the highest level of priority in accounting by retail companies.
  - A: Category that is closely related to issues such as cost savings, a stronger supply chain, and risk reduction, and should be an accounting priority for retail companies.
  - B: Category that is not closely related to issues such as cost savings, a stronger supply chain, and risk reduction, but is desirable for inclusion in accounting by retail companies because it could have a significant potential impact if stronger environmental measures are required, etc.
  - C: Category that is a low priority for accounting because it has no close or strong direct relevance as a management indicator.
  - : No applicable activities exist.
  
- Communication with consumers
  - A: Category that should be an accounting priority for retail companies because there is significant potential for reduction measures in cooperation with consumers.

- B: Category that is desirable for inclusion in accounting because there is some room for cooperative reduction measures, although there is limited potential for reaching out to consumers in this area.
- : Category that is not relevant to communication with consumers or does not include any applicable activities.

Notes:

1. The above explanations were developed with food products and general merchandise, etc., in mind.
2. Companies should select their priority items on reasonable grounds because the importance of accounting items will vary depending on the types of products handled and the company's business format.

### 4.3 Approach for franchise chains

Companies that are leaders of franchise chains account for the emissions of their franchise member stores under Scope 3, Category 14 (excluding stores falling under Scope 1 or 2 as directly managed stores and subsidiaries, etc., of the reporting company). In such cases, only Scope 1 and 2 emissions of member stores are accounted for under Category 14, and other categories may be excluded from accounting. However, in categories where activities are integrated across the franchise chain, it is desirable to include such emissions in accounting, and to determine combined emissions from both directly managed stores and franchise member stores. Table 4.3-1 shows the approach to the scope of accounting for member stores by category. In addition, as a reference, Table 4.3-2 shows the relationship between each category of emissions and emissions subject to reporting under the Accounting and Reporting System in cases of accounting by the leader of a franchise chain.

Table 4.3-1. Scope of accounting in cases of accounting by franchise chain leaders

Division		Category	Subject to accounting?		Comments
Emissions of reporting company			Directly managed stores	Franchise member stores	
	Direct emissions (Scope 1)		Yes	No	Emissions of member stores are Scope 3.
	Energy-derived indirect emissions (Scope 2)		Yes	No	Emissions of member stores are Scope 3.
Other indirect emissions (Scope 3)					
Upstream	1	Purchased goods and services	Rec.		
	2	Capital goods	Rec.		
	3	Fuel and energy related activities not included in Scope 1 or 2	Rec.		
	4	Transportation and delivery (upstream)	Rec.		
	5	Waste generated in operations	Rec.		
	6	Business travel	No		May be included voluntarily
	7	Employee commuting	No		May be included voluntarily
	8	Leased assets (upstream)	Rec.		

Downstream	9	Transportation and delivery (downstream)	Rec.		
	10	Processing of sold products	–		
	11	Use of sold products	Rec.		
	12	End-of-life treatment of sold products	Rec.		
	13	Leased assets (downstream)	–		
	14	Franchises	No	Yes	Only Scope 1 and 2 emissions of member stores.
	15	Investments	–		
	Other	Voluntary			

Yes: Required  
Rec.: Recommended  
No: Not included  
–: Not applicable

Table 4.3-2. Relationship between emission categories and emissions subject to reporting under the Accounting and Reporting System in cases of accounting by franchise chain leaders

Division	Category	Emissions subject to reporting under the Accounting and Reporting System			
Emissions of reporting company					
	Direct emissions (Scope 1)	Yes	Chain business members	Head office, sales offices, directly managed stores, etc.	
			Freight transport operators	Company-owned freight vehicles	
	Energy-derived indirect emissions (Scope 2)	Yes	Chain business members*	Head office, sales offices, directly managed stores, etc.	
Other indirect emissions (Scope 3)					
Upstream	1	Purchased goods and services	No		
	2	Capital goods	No		
	3	Fuel and energy related activities not included in Scope 1 or 2	No		
	4	Transportation and delivery (upstream)	P	Consigners	Within the scope of freight owned by the reporting company
	5	Waste generated in operations	P	Consigners	Only transport of wastes (within the scope of responsibility of waste emitter)
	6	Business travel	No		
	7	Employee commuting	No		
	8	Leased assets (upstream)	No		
Downstream	9	Transportation and delivery (downstream)	P	Consigners	Within the scope of freight owned by the reporting company
	10	Processing of sold products	No		
	11	Use of sold products	No		
	12	End-of-life treatment of sold products	No		

	13	Leased assets (downstream)	No		
	14	Franchises	Yes	Chain business members	Scope 1 and 2 emissions of member stores
	15	Investments	No		
		Other	No		

Yes: Subject to reporting

P: Portions subject to reporting

No: Not subject to reporting

\* In cases where the company owns and uses electric vehicles as company-owned freight vehicles, reporting as a freight transport operator may also be included.

Note: In each case, companies meeting certain size-related conditions are subject to reporting under the Accounting and Reporting System. The scope of coverage of the Energy Conservation Law is the same as that of the Accounting and Reporting System.



## **Part 2. Explanations of Accounting Methodology**

### **1. Reporting company's emissions**

#### **1.1 Direct emissions (Scope 1)**

##### **1.1.1 Scope of accounting**

[Approach in the Basic Guidelines]

Scope 1 covers emissions from domestic and foreign business operations owned or controlled by the reporting company, and accounts for direct emissions including emissions from the use of fuel and industrial processes. When seen in terms of the company alone, Scope 1, combined with Scope 2 which is described in section 1.2, has similar coverage to the Accounting and Reporting System under the Global Warming Countermeasures Act. (In cases of accounting for supply chain emissions under these guidelines, companies subject to consolidation are also included within the scope of accounting of the reporting company.)

However, there are also some emissions activities that go beyond the scope of accounting under the Accounting and Reporting System. These can be optionally included in supply chain emissions accounting.

The Accounting and Reporting System excludes emissions from the use of construction machinery at construction sites, as well as emissions from the use of company-owned passenger cars at companies other than transportation companies. However, all emission activities related to the reporting company's activities are included in the scope of supply chain emissions accounting, so those emissions are also covered in Scope 1.

[Basic approach in the retail industry]

In the retail industry, emissions from domestic and foreign business operations owned or controlled by the reporting company include all uses of city gas and LPG at stores and offices, etc., and all uses of gasoline, etc., in company-owned vehicles. However, emissions at franchise member stores are not included here. (These fall under Category 14 of Scope 3, other indirect emissions.)

In cases where the reporting company is a tenant of an office building, the scope is as follows, based on the owner/tenant approach under the Energy Conservation Act and the Accounting and Reporting System.

- All emissions from portions used exclusively by the tenant (within leased spaces)

\* Emissions from common portions (such as common kitchenettes) are not included.

Cases where the reporting company rents a portion of an office building to tenants as the building's owner are also subject to the owner/tenant approach under the Accounting and Reporting System and the Energy Conservation Act, with the following scope of accounting.

- Scope of energy management authority

Because city gas, LPG, kerosene, and the like are purchased directly by users from suppliers, it is unlikely that double counting would arise between the owner and tenants; but if double

counting occurs, it should be accepted as long as there is no double counting within the reporting company's own emissions. Double counting of the reporting company's own emissions, or internal double counting, occurs when the owner/tenant approach is applied between the reporting company and other entities included within its organizational boundaries (such as subsidiaries) and the same emissions sources are subject to accounting by both parties. In such cases, double counting can be avoided by determining the amount of combined emissions for the owner and tenants.

Table 1.1-1. Scope of owner and tenant accounting in Scope 1

Category	Owner	Tenant
Common portions	○	×
Exclusive portions	△ (only equipment under the owner's energy management authority)	○

Internal double counting\* is eliminated.

\* Internal double counting refers to cases where the same emissions sources are subject to accounting by both the reporting company and other entities included within its organizational boundaries (such as subsidiaries).

Emissions from activities that are not specified in the Accounting and Reporting System may also be included in accounting. For the retail industry, the main activity in this area would be emissions from the use of coolant in air conditioners and product display cases, etc., and it is considered desirable to determine such emissions.

Specific examples of included emissions are indicated below. As a general rule, all of these are to be included. However, emissions may be excluded based on clearly expressed criteria, such as cases where accounting would be difficult or the amount of emissions is sufficiently small.

[Examples of included uses of energy: ]

- Use of fuel and raw materials at stores and offices, etc.: city gas, LPG, kerosene, etc.
- Use of fuel in company-owned vehicles: Gasoline, etc. (beyond the scope of the Accounting and Reporting System)

[Examples of other included emissions:]

- Use of dry ice (only in-store emissions): CO<sub>2</sub>
- Processing of sewage, human excreta, etc.: CH<sub>4</sub>, N<sub>2</sub>O
- Use of aerosol sprays such as dust blower sprays: HFCs
- Beginning use, usage,\* maintenance, and disposal of freezer, refrigerator, and air conditioning equipment: HFCs

\* We recommend accounting for usage beyond the scope of the Accounting and Reporting System.

## 1.1.2 Accounting methodology

[Approach in the Basic Guidelines]

### (1) Accounting methods

Calculations are performed according to the methods of the Accounting and Reporting System as shown below.

When accounting for emissions activities that are not included in this system, calculations should be performed using actual measurements and emissions accounting methods recognized in Japan and overseas, such as methods used in the National Greenhouse Gas Inventory of Japan and the IPCC Guidelines.

At the present time, the following calculation methods may be used for emissions due to leakage during use of coolant in freezer, refrigerator, and air conditioning equipment.

- For cases where the amount of leakage in ordinary use is determined from the amounts filled and recovered during maintenance:

$$\text{CO}_2 \text{ emissions} = \Sigma \{ (\text{Amount of coolant used to fill operating equipment during the emissions accounting period} - \text{Amount recovered and appropriately processed}) \times \text{Global warming coefficient} \}$$

- For cases where the amount of leakage in ordinary use is determined from the leakage rate:

$$\text{CO}_2 \text{ emissions} = \Sigma [ \{ (\text{Amount of coolant contained in operating equipment during the emissions accounting period} \times \text{Emissions unit value during use}^*) - \text{Amount recovered and appropriately processed} \} \times \text{Global warming coefficient} ]$$

[Basic approach in the retail industry]

### (1) Accounting methods

The approach is the same as that of the Basic Guidelines.

When accounting for HFC leakage during the ordinary use of air conditioners and product display cases, etc., companies should refer to the accounting method stated above for emissions due to leakage during use of coolant in freezer, refrigerator, and air conditioning equipment.

## 1.2 Energy-derived indirect emissions (Scope 2)

### 1.2.1 Scope of accounting

[Approach in the Basic Guidelines]

Scope 2 covers emissions from the use of heat and electric power purchased by the reporting company in Japan and overseas. Along with Scope 1 as described in section 1.1, it has generally similar coverage to that of the Accounting and Reporting System under the Global Warming Countermeasures Act.

[Basic approach in the retail industry]

In the retail industry, emissions from the use of heat and electric power purchased by the reporting company in Japan and overseas include all uses of heat and electricity in stores, offices, vehicles, etc. However, emissions at franchise member stores are not included here. (These fall under Category 14 of other indirect emissions.)

In cases where the reporting company is a tenant of an office building, the scope is as follows, based on the owner/tenant approach under the Energy Conservation Act and the Accounting and Reporting System.

- All uses of heat and electricity in portions used exclusively by the tenant (within leased spaces)

\* Emissions from use of heat and electricity in common portions (such as restrooms, corridors, and kitchenettes) are not included.

Cases where the reporting company rents a portion of an office building to tenants as the building's owner are also subject to the owner/tenant approach under the Energy Conservation Act and the Accounting and Reporting System, with the following scope of accounting.

- Scope of energy management authority

Here, the scope is established on the basis of double counting between the owner and tenants under the Energy Conservation Act and the Accounting and Reporting System. If air conditioning, lighting, etc., are under the energy management authority of the owner, and the owner receives energy and then supplies that energy to exclusive tenant portions, either in the form of energy or as services using energy (such as air conditioning and lighting), it is accounted for by both sides. When this sort of double counting occurs, it should be accepted as long as there is no double counting within the reporting company's own emissions. Double counting of the reporting company's own emissions, or internal double counting, occurs when the owner/tenant approach is applied between the reporting company and other entities included within its organizational boundaries (such as subsidiaries) and the same emissions sources are subject to accounting by both parties. In such cases, double counting can be avoided by determining the amount of combined emissions for the owner and tenants.

Table 1.2-1. Scope of owner and tenant accounting in Scope 2

Category	Owner	Tenant
Common portions	○	×
Exclusive portions	△ (only equipment under the owner's energy management authority)	○

Internal double counting\* is eliminated.

\* Internal double counting refers to cases where the same emissions sources are subject to accounting by both the reporting company and other entities included within its organizational boundaries (such as subsidiaries).

Specific examples of included emissions are indicated below. As a general rule, all of these are to be included. However, emissions may be excluded based on clearly expressed criteria, such as cases where accounting would be difficult or the amount of emissions is sufficiently small.

[Examples of included uses of energy: ]

- Use of heat and electricity at stores and offices, etc.
- Use of heat and electricity at short-term rental facilities such as event venues (beyond the scope of the Accounting and Reporting System)
- Use of electricity in company-owned vehicles (beyond the scope of the Accounting and Reporting System)

## 2. Other indirect emissions (Scope 3)

### 2.1 Category 1: Purchased goods and services

#### 2.1.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting for Category 1 consists of emissions from the stage of resource extraction to the stage of manufacturing for all goods (raw materials, parts, purchased items, sales-related materials, etc.) and services purchased or acquired by the reporting company. Goods and services indicate all raw materials, parts, products, and services, etc., brought into the reporting company, including the types indicated below; however, goods and so on that are not directly purchased by the reporting company and are beyond its control may be excluded from accounting. Transportation from the stage of resource extraction to the primary supplier is also included in Category 1. (However, transportation from the primary supplier to the reporting company falls under Category 4.)

- Raw materials, intermediate products, and final products purchased or acquired by the reporting company (including purchased items)
- Software and other services purchased or acquired by the reporting company

[Basic approach in the retail industry]

In the retail industry, this category covers emissions from the stage of resource extraction to the stage of manufacturing for all goods and services directly purchased or obtained, sold, or used by the reporting company. Specific examples of included goods and services are indicated below. As a general rule, all of these are to be included. However, emissions may be excluded based on clearly expressed criteria, such as services where accounting would be difficult and goods where the amount handled is sufficiently small.

[Examples of included goods:]

- Purchased items for sale by the reporting company:
  - Apparel, food products, general merchandise, books, and other purchased products to be sold
  - Raw materials purchased for primary processing at stores (prepared food items, etc.)
- Items used in business activities of the reporting company:
  - Paper products, OA equipment, and other items used in offices
  - Containers and packaging used in sales at stores (plastic shopping bags, boxes, ribbons, etc.), dry ice, cold insulation materials, display items, sales promotion items, and appliances (cooking equipment, etc.)

Notes:

- \* As a general rule, purchased items correspond to items included in the store's sales revenues. Therefore, in cases of stocking for the purpose of sales, where only items to be sold in stores are purchased, accounting covers such purchased items.
- \* Items that are not directly purchased by the reporting company and are beyond the reporting company's control are not included in accounting. Specifically, the scope of

accounting does not include cases where the reporting company performs no management of products, such as cases where products are sold on commission but the products are not purchased by the retail store side, and cases where portions of the reporting company's stores are rented to other businesses (tenants, etc.) under lease agreements.

- \* Even when goods are provided to customers free of charge, they are included if they are provided as a part of the reporting company's business activities.
- \* Displays, etc., which are part of the store's interior decoration are accounted for under Category 2, so these are not included in Category 1.

[Examples of included services:]

- Software of information systems used in business activities
- Advertising and publicity (leaflets, TV commercials, rental of event venues)
- Establishment and management of servers at data centers not located in the reporting company's stores or offices
- Outsourced management services for Internet sales, etc. (Such services are not included in this category if the server is located at the reporting company, because they are accounted for under Scope 1 and 2 in such cases.)

Note:

- \* Services in which the only revenues are handling fees (such as accepting packages on behalf of delivery services) are not included in accounting.

### **2.1.2 Accounting methodology**

[Approach in the Basic Guidelines]

#### (1) Accounting methods

There are two methods of accounting, as follows:

- [1] Determining emissions for goods and services purchased or acquired by the reporting company from the stage of resource extraction to the stage of manufacturing for each supplier and combining these amounts.
- [2] Determining data on volume and monetary amounts for goods and services purchased or acquired by the reporting company and multiplying those figures by emissions unit values from the stage of resource extraction to the stage of manufacturing for the respective goods and services.

Accounting method 1 provides a high level of accounting accuracy, but may be difficult to use in cases where suppliers cannot determine emissions data or emissions data cannot be obtained from suppliers.

Accounting method 2 uses data on physical amounts and monetary values for goods and services purchased or acquired by the reporting company, so accounting is relatively easy. However, since data on physical amounts and monetary values for goods and services purchased or acquired by the reporting company is multiplied by emissions unit values from the stage of resource extraction to the stage of manufacturing, the accuracy of accounting depends on the appropriateness of the categories of data on physical amounts and monetary values determined by the company, as well as the emissions unit values used.

[Basic approach in the retail industry]

(1) Accounting methods

It would be difficult to use accounting method 1 in the retail industry in most cases, because the range of products and services is wide and many suppliers are involved. As a general rule, accounting method 2 should be used in such cases. However, in cases where emissions can be determined using accounting method 1, such as retail sales of private brand products and other cases where data can be obtained from suppliers, accounting method 1 should be used. If it is possible to distinguish between emissions that can be determined using accounting method 1, then both accounting methods 1 and 2 should be used.

Please refer to the guidelines on emissions unit values for emissions unit value categories. In cases where the categories of data determined by the reporting company for physical amounts or monetary values of purchased goods do not match the emissions unit value categories, the data or emissions unit values should be modified in accordance with divisions that cover a larger scope.



## 2.2 Category 2: Capital goods

### 2.2.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting under Category 2 consists of emissions from the construction, manufacturing, and transport of capital goods purchased or acquired during the accounting period. Capital goods are final products having a long usable lifetime, used by a company for the manufacturing of products, provision of services, or sale, storage, and transportation of goods. They are treated as fixed assets in financial accounting.

Therefore, this category includes emissions from raw material manufacturing and transport at all of the reporting company's facilities (factories, offices, stores, etc.), equipment, buildings, etc., as well as emissions during construction (including wastes). In cases of renovation of existing facilities leased from other entities as a tenant, accounting covers only the renovation portion (interior decoration, machinery, etc.).

[Basic approach in the retail industry]

In the retail industry, accounting covers emissions from the construction and manufacturing of all capital goods used in sales and other business activities by the reporting company. Specific examples of included capital goods are indicated below. As a general rule, all of these are to be included. However, some may be excluded based on clearly expressed criteria, such as very small-scale displays, etc., in the interior decoration of stores.

[Examples of included capital goods:]

- Capital goods used for the reporting company's sales activities
  - Stores and other buildings used in sales activities
  - Facilities (such as toilets) and equipment (such as elevators and solar panels) established in stores, etc.
  - Vehicles used in sales activities
  - Sound equipment, light fixtures, and other equipment used in sales activities
- Capital goods used for other business activities of the reporting company
  - Offices and other buildings used in business activities
  - Facilities and equipment established in offices, etc.
  - Vehicles used in business activities

Notes:

- \* Emissions at the stage of utilization of capital goods are not included here, since they are covered under Scope 1 and 2. For example, if the reporting company owns a vehicle for sales activities, Category 2 includes emissions from vehicle manufacturing and delivery of the vehicle to the reporting company, but not emissions from use of the vehicle.
- \* In cases where portions of the reporting company's stores are rented to other businesses (tenants, etc.) under lease agreements, this category includes shared spaces, equipment, and displays. It also includes the basic facilities of leased spaces (walls, partitions, lighting, etc.).
- \* In cases where the reporting company rents sales space from another business under a lease agreement, this category includes changes in displays, etc., in the leased space.

## 2.3 Category 4: Transportation and delivery (upstream)

### 2.3.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting under Category 4 consists of [1] Emissions from distribution (transport, cargo handling, and storage) of goods and services purchased in the fiscal year subject to reporting (emissions from distribution on the upstream side of the reporting company) and [2] Other emissions from distribution services (transport, cargo handling, and storage) purchased in the fiscal year subject to reporting (distribution between the reporting company's facilities and distribution on the downstream side of the reporting company). This does not include distribution performed by the reporting company itself or emissions at the reporting company's facilities (determined under Scope 1 or Scope 2). Cargo handling and storage at pass-through distribution bases (transfer centers) such as distribution centers and cargo handling sites where cargo is only handled briefly, as well as distribution centers that include distribution processing, may be excluded from this category.

[Basic approach in the retail industry]

In the retail industry, the following activities are to be included in accounting under this category.

[Examples of included distribution activities: ]

- Transportation from transaction partners (manufacturers, wholesalers, distribution center designated as the place of delivery, etc.) to stores
- Storage and cargo handling at warehouses where products for delivery are stored (if these are not company-owned facilities)  
Note: This includes product storage in Internet sales.
- Cargo handling and storage at pass-through distribution bases (transfer centers) such as distribution centers and cargo handling sites where cargo is only handled briefly, as well as distribution centers that include distribution processing, within the covered transport zones (voluntary accounting)
- Delivery from stores (or warehouses where products are stored) to consumers (if delivery is ordered by the reporting company)
- Transportation and processing of waste materials for transport (only in cases where waste materials for transport, generated in transportation processes that are subject to accounting, are not covered under Category 5) (voluntary accounting)

Accounting is performed under Category 4 in cases where retailers arrange for delivery upon request by consumers, if the reporting company orders delivery and pays delivery fees in its relationship with the transportation company.

Here, as a general rule, the included goods and services should consist of purchased items for sale by the reporting company (apparel, food products, etc.) and items used in business activities of the reporting company (paper products, etc.) (same as the scope of Category 1).

[For department stores:]

As a general rule, the scope includes purchased items for sale by the reporting company (apparel, food products, etc.) and items used in business activities of the reporting company (paper products, etc.) (same as the scope of Category 1). However, the reporting company should also account for distribution activities of tenants in cases where distribution is integrated by such means as designation of a distribution company or designation of the distribution center to be used.

[For franchise chains:]

In cases where a specific distribution center has been designated as the place of delivery and goods are stocked by the center, delivery from the center to stores is included. (Delivery from manufacturers, etc. to the center is covered under Category 1.)

### 2.3.2 Other points for consideration

[Approach in the Basic Guidelines]

[1] Transportation

In cases of calculation by the fuel method or the fuel consumption method for joint transport and mixed loading, the approach to emissions accounting for consigners under the Accounting and Reporting System is applied, as indicated below.

Table 2.3-1. Standard method of apportioning CO<sub>2</sub> emissions by consigner

Standard method (future goal)	Method of apportioning by freight weight (tons) for each transport zone (recommended method as a goal)	Transport zones are broken down according to freight combinations. For each transport zone, CO <sub>2</sub> emissions are apportioned by freight weight (tons) for each mode of transport, and added up for the total distance traveled between points.
Standard method (at present)	Method of apportioning by measures of transport (ton-kilometers)	CO <sub>2</sub> emissions are apportioned by measures of transport (ton-kilometers).

Table 2.3-2. Alternative method of apportioning CO<sub>2</sub> emissions by consigner

Alternative method A	Method of apportioning by freight weight (tons)	CO <sub>2</sub> emissions are apportioned by freight weight (tons) for amounts shipped, etc. This could be used for deliveries and fixed-zone transportation.
Alternative method B	Method of apportioning by transport costs (simple method when no other options exist)	CO <sub>2</sub> emissions are apportioned by transport costs.

- Notes:
1. In the case of allocation by zones, equal results are produced by ton allocation and ton-kilometer allocation.
  2. If loads are determined in terms of capacity, capacity may be used instead of tonnage.
  3. If a shipment receiver cannot determine tonnage, apportionment could also be based on the number of cases, number of items, and distance transported.

Source: Joint guidelines on methods for calculating carbon dioxide emissions in the logistics sector (Ver. 3.0) by the Ministry of Economy, Trade and Industry and the Ministry of Land, Infrastructure, Transport and Tourism

[Basic approach in the retail industry]

[1] Transportation

In cases where consigners (shippers) use the fuel method or the fuel consumption method for accounting in cases of joint transport and mixed loading, emissions are allocated by the same approach as that of the Basic Guidelines.

The approach is basically the same in cases where shipment receivers use the fuel method or the fuel consumption method for accounting in cases of joint transport, but it would be difficult to use the method of allocation by transport costs in such cases. Therefore, in cases where it would be difficult to allocate emissions by freight weight or measures of transport (ton-kilometers), emissions could be allocated in terms of the ratio of direct distance from the distribution center to the store.

## 2.4 Category 5: Waste generated in operations

### 2.4.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting in Category 5 consists of emissions from disposal and processing of waste generated in the reporting company's business activities (excluding wastes sold for compensation) by parties other than the reporting company. It also includes emissions from the transport of waste. In-house disposal, such as recycling within the reporting company's own processes, is recorded under Scope 1.

In cases where waste is recycled, the scope of accounting needs to be cut off at a certain point. It is not feasible to prescribe one specific method of demarcating this scope, but for example, the scope of accounting could be limited to emissions through preparations for recycling (transport, disassembly, crushing, and sorting), or accounting for recycling processes could be handled by either one side or the other.

[Basic approach in the retail industry]

In the retail industry, the scope of accounting consists of emissions from all disposal and processing of wastes generated in the reporting company's sales activities and other business activities (excluding wastes sold for compensation) by parties other than the reporting company. Specific examples of included wastes are indicated below. As a general rule, all of these are to be included.

[Examples of included wastes:]

- Waste generated in the reporting company's sales activities
  - Plastic waste, paper waste, bottles, cans, and other wastes, including materials used for packaging products at stores
  - Cardboard, plastic waste, and other waste materials used as transportation materials in store delivery
  - Plastic waste, paper waste, and other waste materials used in equipment, displays, and the like at stores, etc.
  - Food wastes generated in cases of primary processing at stores (prepared food items, etc.)
- Waste generated in other business activities of the reporting company
  - Plastic waste, paper waste, and other waste materials generated at offices

Notes:

- \* Wastes collected in trashcans provided at stores are included. However, if the weight or proportion of household waste brought into stores for disposal is known, such household waste may be excluded from accounting.
- \* At retail stores where the owner collects and disposes of wastes generated by tenants, if the reporting company occupies a store as a tenant, only wastes generated by the reporting company's store are included in accounting. If the reporting company has not measured the amount of waste generated from its store, the amount of waste generated from the reporting company's store may be estimated by allocation based on factors such as the ratio of the reporting company's store area to the total area of retail stores.

## 2.5 Category 9: Transportation and delivery (downstream)

The scope of accounting and accounting methods for Category 9 (transportation and delivery, downstream) are indicated below. Explanations concerning movement of customers are given in section 2.6.

### 2.5.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting consists of emissions from distribution of products (transport, cargo handling, storage, and sales) downstream of the reporting company. This does not include distribution performed by the reporting company itself or emissions at the reporting company's facilities (determined under Scope 1 or Scope 2). It also excludes cases where the reporting company orders and pays for transportation services (calculated under Category 4). Cargo handling and storage at pass-through distribution bases (transfer centers) such as distribution centers and cargo handling sites where cargo is only handled briefly, as well as distribution centers that include distribution processing, may be excluded from accounting.

[Basic approach in the retail industry]

Specific examples of included activities in the retail industry for this category are indicated below.

[Examples of included distribution activities: ]

- Deliveries from stores (or warehouses where products are stored) to consumers
- Storage and cargo handling at warehouses where products for delivery are stored (other than facilities of the reporting company)
- Deliveries from manufacturing and processing plants to consumers in cases of factory-direct delivery
- Transport and processing of waste transportation materials (only waste transportation materials generated in transport processes subject to accounting)

Here, products are limited to items included in sales revenues, as a general rule.

However, accounting is performed under Category 4 in cases where retailers arrange for delivery upon request by consumers, if the reporting company orders delivery and pays delivery fees in its relationship with the transportation company. Therefore, accounting includes cases where purchasers directly request delivery from a delivery company or the like at a place managed by the retailer, such as the retailer's store or online shopping site. The consumer generally refers to the purchaser, but this also includes cases where the purchaser will send the purchased items to other parties as gifts for traditional gift-giving occasions such as Bon Festival and year-end gifts. In such cases, the consumer is the delivery recipient. Accounting does not include cases where consumers return the products.

[For department stores:]

Transportation and delivery should be included only for items included in sales revenues. However, in cases where a reporting company includes the movement of customers in accounting, this should cover all customers to stores, regardless of the product purchasing format (whether items are recorded as sales revenues) or the contract format with tenants (lease agreements).

## 2.5.2 Accounting methodology

[Approach in the Basic Guidelines]

(1) Accounting methods

[1] Transportation

For emissions from the use of energy in transportation, accounting is based on the accounting method for specified consigners in the Accounting and Reporting System.

[Basic approach in the retail industry]

For emissions from the use of energy in transportation, accounting is based on the accounting method for specified consigners. However, considering that this category is limited to cases where delivery is requested directly by consumers, and that most deliveries are for small lots, it would be difficult to use the fuel method or the fuel consumption method. The ton-kilometer method could be used in accounting, but depending on the types of products, it could be difficult to accurately determine weight. Therefore, in cases where none of these methods are feasible, a reporting company could obtain data on emissions per package from the delivery company and perform accounting on that basis.

In cases where the ton-kilometer method is used but individual records are not available, scenarios may be established based on the distance of the market area, sizes of vehicles serving the stores, and so on, in accordance with the actual situation of deliveries from stores, etc.

**2.6 Movement of customers (part of Category 9: Transportation and delivery, downstream)**

**2.6.1 Scope of accounting**

[Approach in the Basic Guidelines]  
 A reporting company may account for emissions from the movement of customers for shopping purposes in cases where products are sold at stores and the transaction partners are the final product purchasers. For suburban stores and other stores that attract customers, in which customer movement functions as an alternative to product distribution, it is desirable to account for the movement of customers in order to help determine the overall situation of the supply chain.

[Basic approach in the retail industry]

When consumers travel to stores for shopping and bring their purchased products home, their movement functions as an alternative to product distribution; so it is desirable for the retail industry to determine customer movement from the standpoint of an overall understanding of the supply chain.

When determining customer movement, as a general rule, the scope consists of emissions from movement of customers traveling to and from the reporting company's facilities as their destination, as a general rule, and does not include cases where customers are merely stopping by as part of another trip. Also, in cases where customers visit shopping malls and similar facilities containing the stores of multiple companies in a single location, emissions are determined collectively by the facility manager (facility operator, not individual tenants). Tenants could also calculate emissions for use in considering their sales format or location.

Table 2.6-1. Scope of owner and tenant accounting in the movement of customers

Category	Owner	Tenant
Overall facility	○	×
Individual tenant	×	× (voluntary)

Internal double counting\* is eliminated.

\* Internal double counting refers to cases where the same emissions sources are subject to accounting by both the reporting company and other entities included within its organizational boundaries (such as subsidiaries).

As a general rule, accounting includes cases where customers visit stores for purposes other than shopping (leisure, breaks, meals, etc.). However, visits to the store for purposes that are not included as business activities (such as passing through the store on the way to another location) may be excluded.



## 2.6.2 Accounting methodology

[Approach in the Basic Guidelines]

(There are no statements in the Basic Guidelines concerning accounting methods for the movement of customers.)

[Basic approach in the retail industry]

The following is the basic approach to be used when accounting for the movement of customers.

- The number of store visitors is determined, and accounting is performed for each means of movement (mode of transportation).
- Since customers use different modes of transportation depending on the store's location and sales format, suitable accounting methods should be used for each case.
- The numbers of store visitors and numbers of users of each mode of transportation should be determined by suitable methods in accordance with the sales format.

Below, section (1) indicates the accounting methods for each mode of transportation; section (2) indicates a method of determining the amount of activity for each accounting method; and section (3) shows examples of the accounting methods based on specific scenarios.

### (1) Accounting methods

The following methods are used for accounting, based on determination of the distances traveled or amounts of fuel consumed in customer movement by each mode of transportation (passenger railways, buses, passenger aircraft, and passenger ships).

An accounting method may be established for each store in accordance with the store's characteristics, such as the following.

- Business category
- Location characteristics (near a rail station, in a residential area with no nearby rail station, in the suburbs, etc.)
- Size of store
- Items carried by the store

[For passenger railways, buses, passenger aircraft, and passenger ships:]

$CO_2 \text{ emissions} = (\text{For each mode of transport}) \Sigma (\text{Passenger-kilometers} \times \text{Emissions unit value}) \quad (A)$

Here, "passenger-kilometers" indicates (for each route)  $\Sigma (\text{Number of passengers} \times \text{Passenger transport distance})$ .

[For automobiles:]

Fuel method:

$CO_2 \text{ emissions} = \Sigma \{ \text{Amount of fuel usage} \times \text{Emissions unit value} (= \text{Unit calorific value} \times \text{Emission coefficient} \times 44/12) \} \quad (B)$

Fuel consumption method:

$$\text{CO}_2 \text{ emissions} = \Sigma \{ \text{Transport distance} / \text{Fuel consumption} \times \text{Emissions unit value} (= \text{Unit calorific value} \times \text{Emission coefficient} \times 44/12) \} \quad (\text{C})$$

It is expected that in general, it would be difficult to directly obtain the data needed to apply the above formulas. Therefore, certain scenarios are established for each store, and emissions are estimated for each store in accordance with such scenarios. Scenarios may be used either individually or in combination. Methods of establishing specific scenarios are indicated in section (3) below.

For stores where it is not feasible to establish scenarios by those methods, standard per-store emissions are calculated according to store locations and sizes, based on the results of emissions accounting at sampled stores; and such emissions are added up to estimate the total.

For emissions unit values, please refer to the Report on Emissions Unit Values.

(2) Amount of activity

Realistically, it would be difficult to obtain actual measures (such as person-kilometers) for each mode of transportation, or actual distances traveled in private vehicles, as measures of activity. Therefore, emissions are calculated after determining amounts of transportation, etc. through estimation based on sampling surveys and scenarios.

In cases of accounting by tenants, the reporting company should survey customers who visit its store to determine its own data; and data that is difficult for a tenant to determine, such as the number of vehicles using the parking lot, would need to be obtained from the owner. It could be difficult to find the correspondence between parking lot users and visitors to the reporting company's store, so in such cases, allocation should be based on ratios such as the ratio of store visitors, ratio of sales figures, or ratio of total floor area.<sup>2</sup>

Table 2.6-2. Method of determining amounts of owner and tenant activities in customer movement (example)

Type of data	Owner	Tenant
Number of store visitors	Survey independently (owner's own data)	Survey independently (tenant's own data)
Ratio of primary objective visitors	Survey independently (marketing survey, etc.)	Survey independently or obtain data from owner (using overall facility figures as provided)
Share by distance segment	Survey independently (marketing survey, etc.)	Survey independently or obtain data from owner (using overall facility figures as provided)
Share by mode of transportation	Survey independently (marketing survey, etc.)	Survey independently or obtain data from owner (using overall facility figures as provided)
Number of vehicles using parking lot	Survey independently (owner's own data)	Obtain data from owner (allocation by ratio of store visitors, ratio of sales figures, or ratio of floor area)

<sup>2</sup> For example, if a reporting company has determined the number of customers visiting its store, it could obtain data from the owner on the number of customers visiting the entire facility and number of vehicles using the parking lot, and perform allocation based on the ratio of the number of customers visiting its store.

Average travel distance	Survey independently (marketing survey, etc.)	Survey independently or obtain data from owner (using overall facility figures as provided)
-------------------------	---	---

\* The types of data needed for accounting are dependent on the accounting method.

### (3) Example of accounting method based on specific scenarios

In general, it would be difficult to directly determine the data needed in order to use the formulas shown in section (1) above. Therefore, a certain scenario is established for each store based on the following kind of approach, and emissions are estimated for each store in accordance with such scenarios.

- [1] Calculating the number of users of each mode of transportation and distances traveled from the number of store visitors along with the customer distribution and shares by mode of transportation based on sampling surveys
- [2] Calculations based on fuel consumption of the main modes of public transportation (such as buses) used by customers
- [3] Calculations from travel distances based on operations of the main modes of public transportation (such as buses) used by customers
- [4] Calculating the number of customers using private vehicles and their travel distances based on the number of vehicles using the parking lot (actual figures) and customer distribution (sampling survey)

As seen above, there are multiple ways of calculating the movement of customers. Reporting companies may use the following approach, for example, to select a method to use in accounting. For allocation methods in cases of accounting by tenants, please refer to Table 2.6-2.

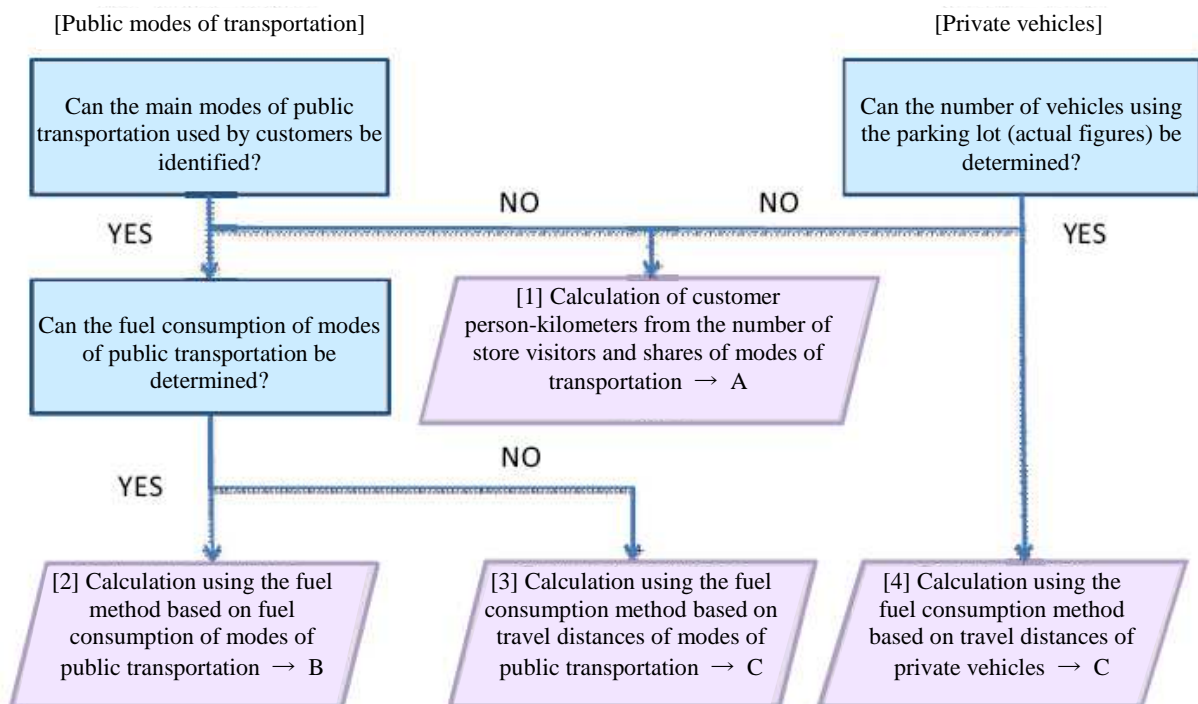


Fig. 2.6-1. Approach to selecting an accounting method for movement of customers (example)

The following are examples of the respective flows of specific calculations when using calculation methods A to C based on scenarios [1] through [4].

[1] Calculation of customer person-kilometers from the number of store visitors

The following steps are followed for calculations.

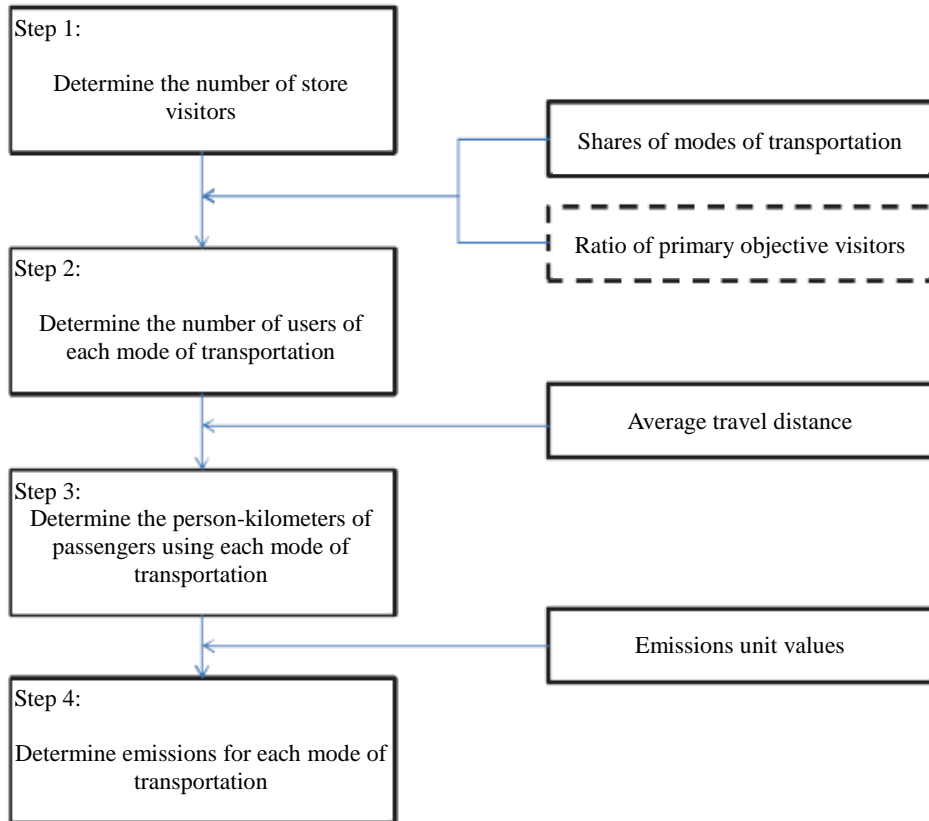


Fig. 2.6-2. Flow of calculations with passenger person-kilometers based on number of store visitors (example)

[Step 1: Determine the number of store visitors]

This number is determined through measurements by human counting or sensors, or counts based on analysis of camera images. If the number of store visitors cannot be directly determined, this can be estimated based on store records of the number of customers making purchases, the average number of companions based on sampling surveys, etc., and the number of purchases made by store visitors.

[Step 2: Determine the number of users of each mode of transportation]

The share of each mode of transportation is determined and this figure is calculated by the following formula. For calculations excluding visitors who are stopping by as part of another trip, it is also necessary to determine the ratio of primary objective visitors.

$$\text{Number of users of mode of transportation } i = \text{Number of store visitors (x Ratio of primary objective visitors)} \times \text{Share of mode of transportation } i$$

(Ratio of primary objective visitors = 1 – Ratio of visitors who are stopping by as part of another trip)

Here, the shares of modes of transportation should be determined for individual areas if it is possible to divide up the areas based on distance segments from the store and area transportation characteristics, etc. (and if it is possible to categorize store visitors according to such divisions).

If the ratio of primary objective visitors by mode of transportation is known, then a ratio of primary objective visitors may be determined for each mode of transportation.

[Step 3: Determine the person-kilometers of passengers using each mode of transportation]

This is obtained by the following formula after determining the average travel distance of customers using each mode of transportation.

Person-kilometers of passengers using mode of transportation  $i$  = Number of users of mode of transportation  $i$  x Average travel distance of customers using mode of transportation  $i$

Here, the average travel distance is determined from data such as the average values from responses to sampling-based marketing surveys, etc., or the distance of the store from representative points in each area if the areas have been divided up based on distance segments from the store and differences in area transportation characteristics, etc.

[Step 4: Determine emissions for each mode of transportation]

Emissions are calculated using formula A, based on the person-kilometers of passengers using each mode of transportation and emissions unit values.

[2] Calculation based on fuel consumption of modes of public transportation

Emissions are calculated using formula B, based on the main modes of public transportation (such as buses) used by customers and data on fuel consumption obtained from public transport operators.

[3] Calculation based on travel distances of modes of public transportation

The following steps are followed for calculations for the main modes of public transportation (such as buses) used by customers.

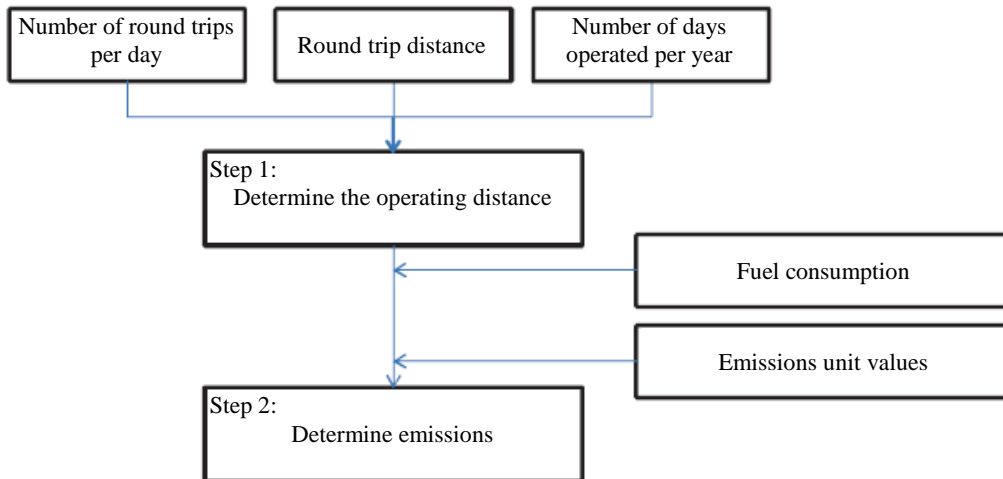


Fig. 2.6-3. Flow of calculations based on fuel consumption by modes of public transportation (example)

[Step 1: Determine the operating distance]

This is obtained by the following formula after determining the number of round trips per day, round trip distance, and number of days operated per year.

$$\text{Operating distance of main modes of public transportation (such as buses) used by customers} = \text{Number of round trips per day} \times \text{Round trip distance} \times \text{Number of days operated per year}$$

[Step 2: Determine emissions]

Emissions are calculated using formula C, based on operating distance, fuel consumption, and emissions unit values.

If possible, fuel consumption figures based on actual measurements should be obtained from the public transport operators. If this is not feasible, national averages may be used for fuel consumption, etc.

[4] Calculation based on travel distances of private vehicles (number of vehicles using the parking lot)

The following steps are followed for calculations.

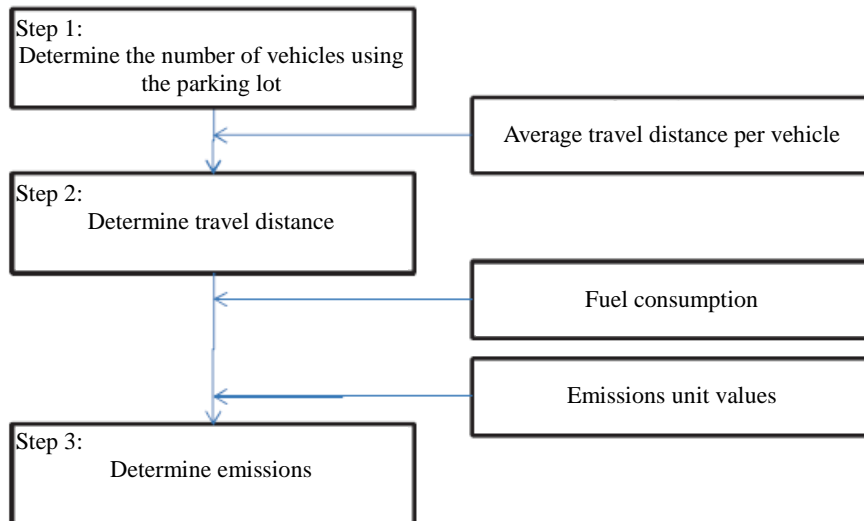


Fig. 2.6-4. Flow of calculations based on travel distances of private vehicles (number of vehicles using the parking lot) (example)

[Step 1: Determine the number of vehicles using the parking lot]

The number of vehicles using the store parking lot or other parking lot thought to be used by customers is determined from figures such as the number of parking stubs issued.

Because fuel consumption varies widely depending on the model of vehicle, distinctions should be made between full-sized cars and light motor vehicles, if possible.

[Step 2: Determine travel distance]

This is calculated using the following formula after determining the average distance traveled per vehicle.

$$\text{Travel distance of private cars (total)} = \text{Number of vehicles using the parking lot (actual figure)} \times \text{Average distance traveled per vehicle (sampling surveys)}$$

Here, the average distance traveled per vehicle is determined from data such as the average values from responses to sampling-based marketing surveys, etc., or the distance of the store from representative points in each area if the areas have been divided up based on distance segments from the store and differences in area transportation characteristics, etc.

[Step 3: Determine emissions]

Emissions are calculated using formula C, based on travel distance, fuel consumption, and emissions unit values.

Because it is generally difficult to determine actual measurements of fuel consumption, figures based on sampling surveys or national averages may be used for fuel consumption.

## Reference data

The following are the results of a survey of consumer purchasing behavior conducted by the Ministry of the Environment in February 2012 (online questionnaire survey), included here as reference data for determination of the ratio of visitors who are stopping by as part of another trip and the shares of modes of transportation. As a general rule, the figures used should be determined individually in accordance with the actual situation of each store; however, this may be used as a reference if the situation is not clear. Also, it should be noted that sample sizes were small in some cases, and that the only objectives included for going out were to purchase beverages and bread.

### [Subjects of survey of consumer purchasing behavior]

- 15,000 online survey respondents consisting of 1,000 persons residing in each of the following 15 metropolitan areas

Major metropolitan area	Tokyo, Kansai, and Nagoya regions
Core cities of the regions	Sapporo, Sendai, Hiroshima, Niigata, Okayama, Shizuoka, Hamamatsu, Utsunomiya, Matsuyama, Kumamoto, Fukuoka-Kitakyushu, and Kagoshima

- Respondents were classified by gender and age as follows, and equal sample sizes were obtained for each segment.
  - Male and female
  - Age bracket (18-29, 30-39, 40-49, 50-59, and 60 and over)
    - \* Age brackets were combined in some cases when sample sizes were too small in certain areas.



[1] Purpose of going out to the place of purchase

A. Beverage purchases

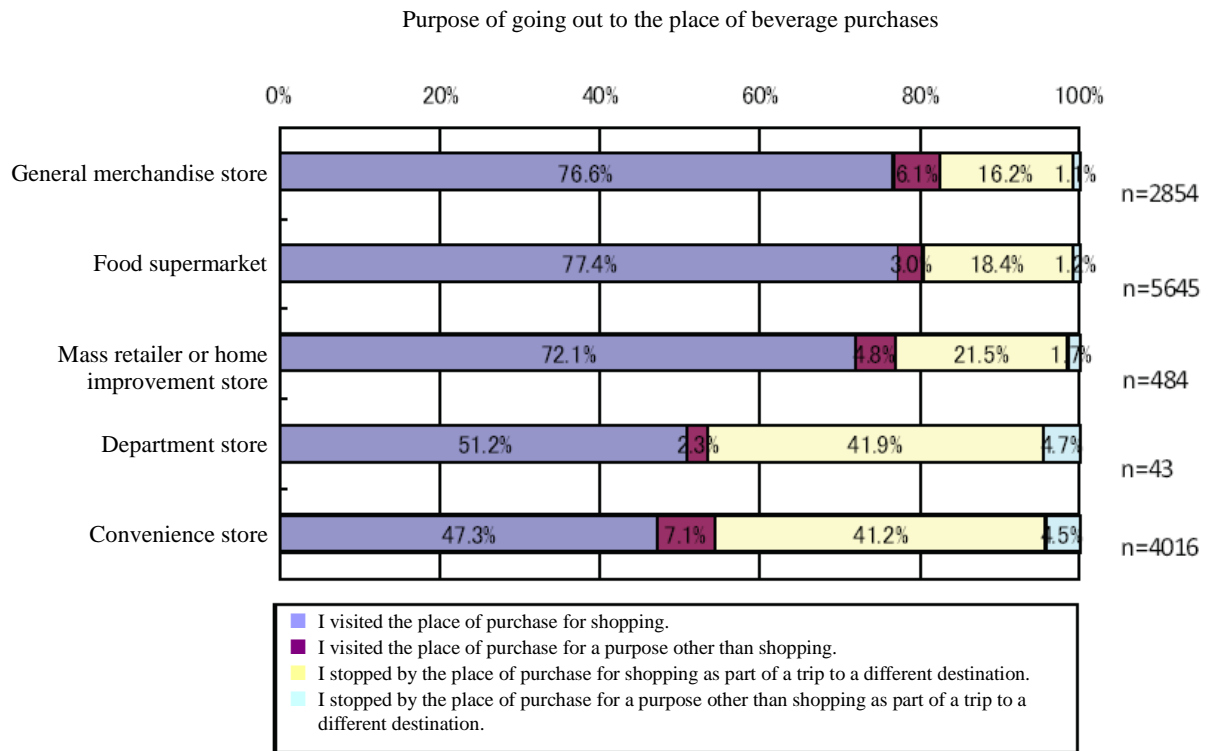


Fig. 2.6-5. Purpose of going out to the place of beverage purchases

## B. Bread purchases

Purpose of going out to the place of bread purchases

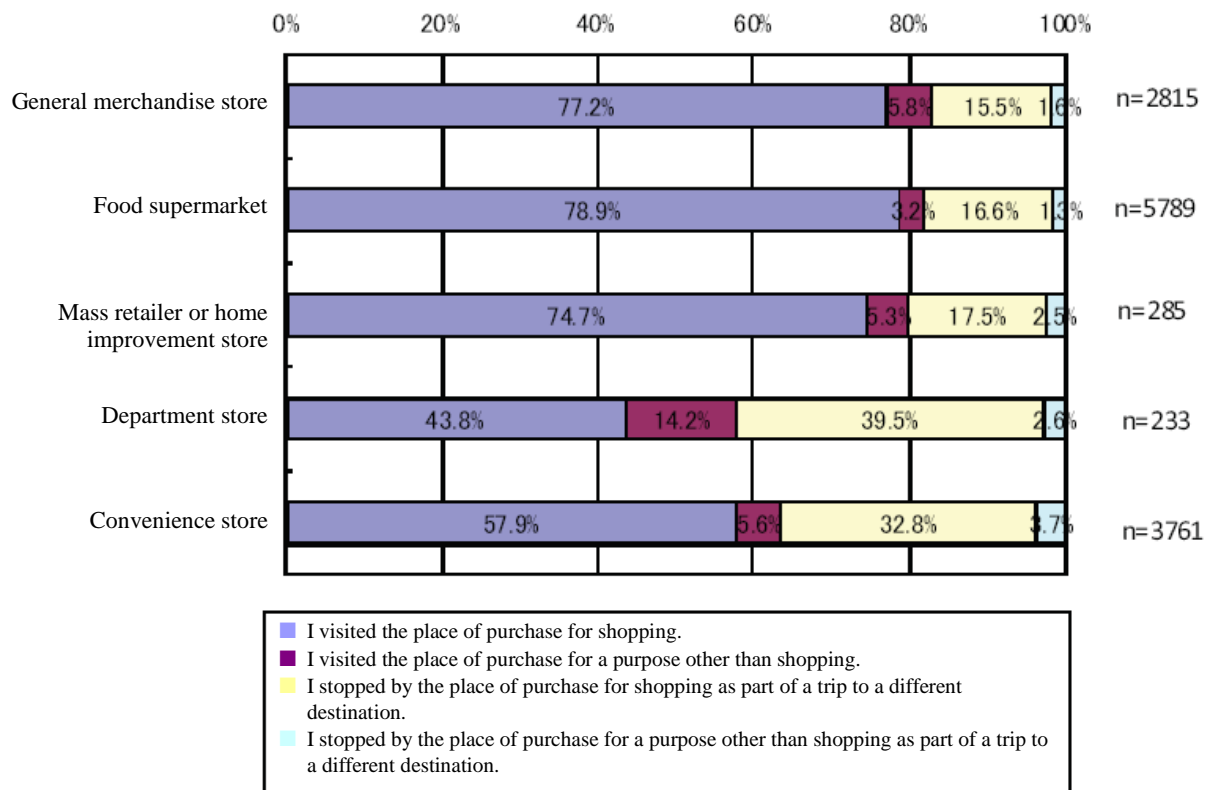


Fig. 2.6-6. Purpose of going out to the place of bread purchases

[2] Shares of modes of transportation and average travel times by type of retail facility

A. Shares of modes of transportation by type of retail facility

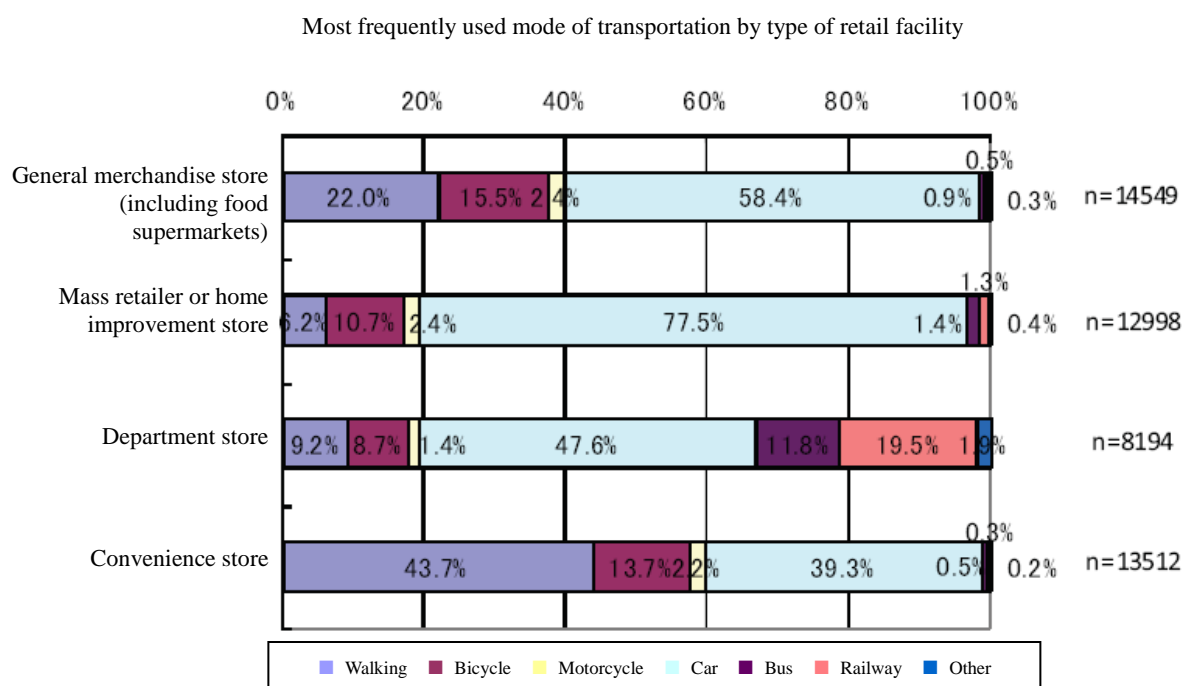


Fig. 2.6-7. Most frequently used mode of transportation by type of retail facility

B. Average travel times and distances by type of retail facility

Table 2.6-3. Average travel times and distances by type of retail facility

	General merchandise store (including food supermarkets)		General retail store		Mass retailer or home improvement store		Department store		Convenience store	
	Average time (min.)	Average distance (m)	Average time (min.)	Average distance (m)	Average time (min.)	Average distance (m)	Average time (min.)	Average distance (m)	Average time (min.)	Average distance (m)
Walking	7.8	624	7.8	626	12.4	992	14.7	1,177	5.1	411
Bicycle	8.5	2,133	9.	2,266	13.1	3,282	17.5	4,380	5.6	1,412
Motorcycle	8.7	2,611	9.3	2,791	12.7	3,808	18.8	5,630	5.7	1,712
Car	11.1	3,337	11.3	3,393	14.4	4,328	22.9	6,885	6.2	1,852
Bus	21.5	4,668	22.1	4,778	22.4	4,844	27.3	5,912	17.7	3,838
Railway	21.4	10,701	23.9	11,945	26.1	13,049	30.1	15,038	20.5	10,273
Other	14.8		16.9		20.3		25.3		18.9	
Total	10.1		10.3		14.4		23.6		5.8	

Note: To determine the average distances, the average travel times were multiplied by the speeds of each mode of travel, based on the figures of 4.8 km/h for walking, 15 km/h for bicycles, 18 km/h for cars, 13 km/h for buses, and 30 km/h for railways, taken from a "survey report on environmental conditions to promote bicycle use" by the survey committee on bicycle traffic network development.

Below are two examples of accounting for the movement of customers. Both are examples of emissions accounting for specific stores.

[Example 1] Estimating customer shares by distance segment and shares of modes of transportation and calculating emissions based on the number of store visitors

This is the method of calculating emissions based on the number of store visitors and use of each mode of transportation. Figures used for the modes of transportation used by customers when visiting the store and distances traveled are based on questionnaire results, etc.

(1) Determining the number of store visitors and scope of market area

The total annual number of store visitors and scope of the market area (radius, with store at the center) are determined.

Number of store visitors:	1,000,000	persons/year
Radius of market area:	30	km

\* Here, the ratio of primary objective visitors is not taken into consideration.

(2) Determining the service zones and share of each service zone

Several distance segments (service zones) are determined within the scope of the market area, and questionnaire surveys, etc. are used to identify the proportion (share) of customers who come from each service zone.

	Service zone 1	Service zone 2	Service zone 3	
Distance (km)	10	20	30	
Share	50%	30%	20%	→ Total: 100%

(3) Determining the shares of modes of transportation

Questionnaire surveys, etc. are used to identify the shares of modes of transportation for customer visits from each service zone.

Typical means of transportation	Service zone 1	Service zone 2	Service zone 3	
Distance (km)	10	20	30	
Private car	20%	40%	50%	
Railway	20%	30%	30%	
Bus	30%	20%	20%	
Bicycle or walking	30%	10%	0%	
				→ Total: 100%

(4) Determining the amount of transportation (person-kilometers) for each mode of transportation

The amount of transportation (person-kilometers) for each mode of transportation is determined from the number of store visitors, share of each service zone, shares of modes of transportation in each service zone, and distances of each service zone.

Amount of transportation (person-kilometers) for each mode of transportation

= Number of store visitors x  $\Sigma$  (Share of service zone x Shares of modes of transportation in service zone) x Distance of service zone

Category	Amount of activity		
	Item	Unit	Amount
Private car	Amount of transportation	Person-kilometers	6,400,000
Railway	Amount of transportation	Person-kilometers	4,600,000
Bus	Amount of transportation	Person-kilometers	3,900,000

(5) Determining emissions

The amount of GHG emissions is determined from the amount of transportation (person-kilometers) for each mode of transportation and emissions unit values.

Category	Amount of activity			Emissions unit value			GHG emissions (t-CO <sub>2</sub> )
	Item	Unit	Amount	Domestic or overseas	Unit	Value	
Private car	Amount of transportation	Person-kilometers	6,400,000	Domestic	g-CO <sub>2</sub> /person-kilometer	175	1,120
Railway	Amount of transportation	Person-kilometers	4,600,000	Domestic	g-CO <sub>2</sub> /person-kilometer	19	87
Bus	Amount of transportation	Person-kilometers	3,900,000	Domestic	g-CO <sub>2</sub> /person-kilometer	53	207
Total							1,414

Note: All of these amounts are hypothetical and are included for explanatory purposes only. Do not use these numbers in actual accounting.

[Example 2] Calculating emissions from the use of private cars by customers based on the number of vehicles using the parking lot (actual figures)

This is the method of calculating emissions based on the number of vehicles using a parking lot owned or managed by the reporting company for use by customers visiting the store. This method could be used in cases where a parking lot with entry/exit management is used by more than half of a store's customers who arrive by car. The distance driven to the store is determined by questionnaire surveys, etc.

(1) Determining the parking lot and market area

It is necessary to determine the number of vehicles using the parking lot in question, the ratio of light motor vehicles based on on-site sampling surveys, etc., and the scope of the market area (radius, with store at the center).

Number of vehicles parked:	1,000,000	cars/year
Ratio of light vehicles:	41%	
Radius of market area:	30	km

(2) Determining the service zones and share of each service zone

Several distance segments (service zones) are determined within the scope of the market area, and questionnaire surveys, etc. are used to identify the proportion (share) of customers who come from each service zone.

	Service zone 1	Service zone 2	Service zone 3
Distance (km)	10	20	30
Share	31.25%	37.50%	31.25%

→ Total: 100%

(3) Determining the number of private vehicles from each service zone

The parked vehicles are allocated to each service zone based on the share of each service zone. The numbers of full-sized cars and light motor vehicles are determined based on the proportion of light motor vehicles.

	Service zone 1	Service zone 2	Service zone 3
Number of private vehicles	312,500	375,000	312,500
Number of full-sized cars	182,880	219,456	182,880
Number of light motor vehicles	129,620	155,544	129,620

(4) Determining the travel distance from each service zone

The total travel distance is determined from the distance of each service zone and the number of private vehicles.

	Service zone 1	Service zone 2	Service zone 3
Distance (km)	10	20	30
Travel distance of full-sized cars	3,657,603	8,778,248	10,972,809
Travel distance of light motor vehicles	2,592,397	6,221,752	7,777,191

\* Here, travel distances do not indicate the actual distance of movement but the maximum distance for each service zone.

(5) Determining emissions

After determining fuel consumption and emissions unit values, emissions are calculated based on the motor vehicle travel distance.

Fuel consumption of full-sized cars	9.03	km per liter
Fuel consumption of light motor vehicles	11.11	km per liter
Emissions unit value	0.00232166	t-CO <sub>2</sub> per liter

	Service zone 1	Service zone 2	Service zone 3
Gasoline used by full-sized cars	405,050	972,120	1,215,151
Gasoline used by light motor vehicles	233,339	560,014	700,017
GHG emissions	1,482	3,557	4,446

↓  
9,486t CO<sub>2</sub>

Note: All of these amounts are hypothetical and are included for explanatory purposes only. Do not use these numbers in actual accounting.

## 2.7 Category 11: Use of sold products

### 2.7.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting in Category 11 consists of emissions from the use of products. The products covered are products sold in the fiscal year subject to accounting (including systems and services).

Specifically, emissions included in this category are classified under the following two stages.

[Direct use stage emissions:]

- Energy-derived carbon dioxide emissions from the use of electricity, fuel, and heat in products such as household appliances
- Emissions of 5.5 gases in products that directly emit 5.5 gases during use, such as air conditioners

[Indirect use stage emissions:]

- Energy-derived carbon dioxide emissions from the use of products that indirectly involve the use of electricity, fuel, and heat, such as clothing (requires washing and drying) and food (requires cooking, refrigeration, and freezing).

Of the above, direct use stage emissions from sold products are subject to accounting without fail. Indirect use stage emissions from sold products may also be included in accounting, and should be included if they are important in terms of the scale of indirect use stage emissions or potential for reduction of emissions, etc. It is desirable to omit such emissions if this would clearly cause double counting among sold products for the same source of emissions.

[Basic approach in the retail industry]

In the retail industry, with regard to products sold by the reporting company, emissions from the use of products having direct use stage emissions are subject to accounting without fail. Emissions from the use of products having indirect use stage emissions are not included in accounting as a general rule, but may be included in accounting if this is desirable in terms of potential for reduction of emissions, etc. The following are specific examples of products having direct use stage emissions that are subject to accounting.

[Examples of products having direct use stage emissions that are subject to accounting:]

- Products whose use involves the use of electricity, such as light bulbs
- Products whose use involves direct emissions of greenhouse gases, such as fireworks, lighters, gas cylinders, and charcoal

### 2.7.2 Accounting methodology

[Approach in the Basic Guidelines]

In accounting for Category 11, the amount of energy consumption during use, based on quantities sold, etc., and standard usage scenarios (a product's design specifications and assumptions concerning the conditions of product use by consumers), is multiplied by an

emissions unit value to determine emissions.

[Basic approach in the retail industry]

Some products having indirect use stage emissions involve differences in the use of electricity and heat, etc., during product use depending on the sales conditions (such as beverages sold at room temperature but chilled before drinking, or food products that are heated before eating). In cases where products having indirect use stage emissions are included in accounting, it is desirable to give consideration to differences in sales conditions when establishing scenarios of product storage and use.



## 2.8 Category 12: End-of-life treatment of sold products

### 2.8.1 Scope of accounting

[Approach in the Basic Guidelines]

The scope of accounting under Category 12 consists of emissions from the disposal and processing of products manufactured or sold by the reporting company, as well as the containers and packaging of such products.

In cases where products are recycled, the scope of accounting needs to be cut off at a certain point. It is not feasible to prescribe one specific method of demarcating this scope, but for example, the scope of accounting could be limited to emissions through preparations for recycling (transport, disassembly, crushing, and sorting), or accounting for recycling processes could be handled by either one side or the other.

[Basic approach in the retail industry]

In the retail industry, accounting includes emissions from the disposal and processing of products sold by the reporting company as well as product containers and packaging. Since it would be difficult to determine emissions from the disposal and processing of all sold products, containers, and packaging in the retail industry, accounting covers all of the following products, containers, and packaging that can be determined by the retail industry, as a general rule.

[Examples of sold products, containers, and packaging subject to accounting]

- Containers and packaging used in sales at stores (paper bags, wrapping paper, plastic shopping bags, etc.)
- Containers and packaging used in cases of primary processing (for prepared food items, etc.) at stores (trays, packs, etc.)
- Containers and packaging used collected in collection boxes, etc., at stores (polystyrene foam trays, etc.)

Notes:

- \* This includes items that must be determined by companies under the Container and Packaging Recycling Law.
- \* This does not include products which are expected to be fully consumed after being sold, such as food products.
- \* If the reporting company can determine the amount or ratio sold by the reporting company from among all products, containers, and packaging collected at its stores, it should perform accounting as if only the portion sold by the reporting company was included in recycling. If the amount or ratio sold by the reporting company is not known, recycling of all collected products, containers, and packaging may be included in accounting.

The following products, containers, and packaging may be included in cases where direct determination would be difficult in the retail industry, but it is possible to determine the necessary data (volumes, weights, etc., of waste involved in disposal and recycling) by measurement or by obtaining information from the product manufacturers, etc.

[Examples of sold products, containers, and packaging that may be included]

- Apparel, general merchandise, books, and other sold products
- Containers and packaging added to sold products at the time of stocking (film, protective materials, etc.)

## 2.8.2 Accounting methodology

[Approach in the Basic Guidelines]

### (1) Accounting methods

In cases where actual data on disposal and recycling (such as processing methods for each type of waste) can be determined, emissions are calculated by multiplying the amounts of waste disposal or recycling, for each type of waste and processing method, by the respective emissions unit value for each type of waste and processing method. If it is not feasible to determine actual figures on disposal and recycling, emissions are estimated by multiplying the costs or amounts of processing by waste disposal and recycling companies by emissions unit values based on standard scenarios for each type of waste. The standard scenarios could be established with reference to processing ratios throughout Japan for each type of waste and each processing method.

### (2) Amount of activity

In cases where actual data on disposal and recycling (such as processing methods for each type of waste) can be determined, the amount of activity is the amount of waste disposal or recycling for each type of waste and processing method. In cases where such data cannot be determined, the costs of waste processing (or amounts) and costs of recycling (or amounts) should be determined as the amount of activity.

[Basic approach in the retail industry]

### (1) Accounting methods

In the retail industry, it would be difficult to determine the actual situation of disposal and recycling (such as processing methods by type of waste) of products, containers, and packaging sold by the reporting company. Therefore, as a general rule, emissions unit values based on standard scenarios are used for each type of waste.

### (2) Amount of activity

In the retail industry, it would be difficult to determine the actual situation of disposal and recycling (such as processing methods by type of waste) of products, containers, and packaging sold by the reporting company, and it would also be difficult to determine waste processing costs and recycling costs. Therefore, as a general rule, the amounts of waste processing and amounts of recycling should be determined as the amount of activity.

## 2.9 Category 14: Franchises

### 2.9.1 Scope of accounting

[Approach in the Basic Guidelines]

In cases where the reporting company is a franchise chain leader, the scope of accounting consists of Scope 1 and 2 emissions at franchise members (companies having entered into a franchise agreement). However, this does not include franchise members which are included in Scope 1 or 2.

As a general rule, the scope of this category excludes emissions included in Scope 1 and 2 (reporting company's places of business, etc.) for specified chain businesses subject to accounting under the Accounting and Reporting System. However, it is desirable to include other Scope 1 and 2 emissions of franchise members, such as fuel in vehicles used by franchise members.

[Basic approach in the retail industry]

In the retail industry, it is a common practice to open stores as part of franchise chains. Here, the conditions for a franchise chain are the same as the scope of specified chain business operators under the Accounting and Reporting System. (See below.)

[Conditions of a "chain business operator" (franchise chain)]

- (1) This indicates an entity conducting a business based on an agreement using standard terms and conditions that permits others to use a specific trademark, business name, or other designation, subject to designated methods for selling products or providing services, and provides continuous management guidance; in which such terms and conditions include provisions concerning the following matters.
  - (a) Energy-derived carbon dioxide (similar to the Energy Conservation Act)
    - [1] Matters concerning reporting of the state of energy use
    - [2] Matters concerning designation of models, performance, temperature settings, or other methods for the use of air conditioning and heating equipment, freezer equipment, refrigeration equipment, lighting devices, cooking equipment, and heating equipment
  - (b) Other greenhouse gases
    - [1] Matters concerning reporting of the state of business activities involving greenhouse gas emissions
    - [2] Matters concerning designation of models, performance, or methods for the use of equipment involving greenhouse gas emissions, according to the greenhouse gas categories for reporting under [1]
- (2) If the above provisions are indicated in written agreements other than the terms and conditions concluded by the chain business operator with the franchise member, or in policies, codes of conduct, or manuals established by persons conducting operations, and the terms and conditions require compliance with such provisions, then the terms and conditions shall be considered to include such provisions.

Source: Greenhouse Gas Emissions Accounting and Reporting Manual, Ver. 3.2, Ministry of the Environment

[Examples of included franchise member stores:]

- Convenience stores, etc.

This category consists of the emissions of specified chain business operators subject to accounting under the Accounting and Reporting System, excluding emissions (handled under Scope 1 and 2) of the reporting company (head office and directly managed stores, etc. In addition, it includes activities that are not subject to accounting under the Accounting and Reporting System (such as HFC leakage during the ordinary use of air conditioners and product display cases) and emissions that are not subject to accounting under that system (such as emissions from the use of gasoline in company-owned passenger cars).

This category should be used only for emissions that are included in Scope 1 and 2 for franchise members. Scope 3 emissions of franchise members are not included in this category, but are accounted for separately from the reporting company's places of business, etc., in an individual category.