Basic Policy on Promoting Green Purchasing

（Provisional Translation）

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This document defines the basic policies for promoting comprehensive and planned procurement of materials, components, products and services with low environmental impact (hereinafter referred to as "eco-friendly goods"). This is the basic policy of the national government (e.g. the Diet, government ministries and agencies, and courts) and corporations defined by the government ordinance 556 of the year 2000 specifying corporations (hereinafter referred to as "Incorporated Administrative Agency") in Article 2, Paragraph 2 of Act on Promotion of Procurement of Eco-friendly Goods and Services by the State and Other Entities. It is hoped that local governments, enterprises, and citizens will also make a commitment to the procurement of eco-friendly goods by taking this basic policy into consideration.

The national government shall continue to work in existing dealings to promote environmental conservation in coordination with this basic policy.

1. Basic Direction for the Promotion of Green Purchasing by the Government and Incorporated Administrative Agencies

1.1 Background and Significance of the Promotion of Green Purchasing

Current concerns for global warming and waste management, among other environmental issues, are rooted in the system of production and consumption, which has promoted mass production, mass consumption, and mass waste. In order to address these issues, it is essential that we transform our economy and our societies into sustainable ones. This will require a commitment by all sectors to reduce environmental impact. We must immediately reduce the environmental impact of the goods and services that support our lifestyles and economic activities, and promote a shift in demand toward eco-friendly goods.

In order to shift demand toward eco-friendly goods and services, it is important to not only promote the supply of eco-friendly goods and services, but also to promote prioritizing the purchase of eco-friendly goods and services. Prioritizing the purchase of eco-friendly goods and services will help form markets for these goods and services, which in turn will promote their development and, as a result, increased purchase of eco-friendly goods and services. The resulting continuous improvement will create a ripple effect in the market. It is necessary for all persons to make a strong commitment to prioritize the purchase of eco-friendly goods and services as an integral part of their lives. This is the first step toward wider environmental conservation activities by the procurement entities.

The Government and Incorporated Administrative Agencies (hereinafter referred to as "the Government") play a major role in the national economy and have huge influence on the other entities. Their role is very important in promoting a ripple effect in the market, by prioritizing and popularizing the purchase of eco-friendly goods and services. That is to say, the Government's initiative promoting the planned purchase of eco-friendly goods and services will have a priming effect; expanding this commitment to local governments and the private sector, promoting the shift in demand toward eco-friendly goods and services in Japan as a whole. The promotion of green purchasing

based on this basic policy conforms to Article 24, "Promotion of Use of Products Contributing to Reduction of Environmental Load," of the Basic Environment Act (Law No.91, 1992), and Article 19, "Promotion of Use of Recycled Articles," of The Basic Act for Establishing a Sound Material-Cycle Society (Law No. 110, 2000).

In consideration of the recent measures against global warming, the Government needs to take the leadership in green purchasing more than the equal in the past, based on "Immediate-Term Policy on the Countermeasures against Global Warming" (Global Warming Prevention Headquarters decision, March 15, 2013).

1.2 Basic Approach toward the Promotion of Green Purchasing

Each fiscal year, each institution of the government (hereinafter referred to as "each institution") shall formulate and publish a green purchasing policy in conformance with this basic policy and based on Article 7, "Act on Promotion of Procurement of Eco-friendly Goods and Services by the State and Other Entities" (Law No. 100, 2000; hereinafter referred to as "Act on Promoting Green Purchasing") taking into consideration its budget and planned projects and activities for the fiscal year, and shall purchase goods and services during the fiscal year based on this green purchasing policy.

Specifically, each institution shall purchase and utilize goods and services based on the following philosophy:

(1) In addition to conventional considerations such as price and quality, environmental conservation must be considered when making purchasing decisions. This will make the reduction of the environmental impact of goods and services an element for a successful procurement contract, along with price and quality. The resulting competition between enterprises will lead to the popularization of eco-friendly goods. In awareness of this, each institution shall consider the possibility to reduce environmental impact in its procurement for as wide a range of goods and services as possible, considering the business's promotion for reduction of the environment impact not to mention the observance of regulations related to environment.

(2) In view of the maximum reduction of environmental impact, a wide range of environmental factors, including global warming, air pollution, waste, and the decrease of biodiversity, need to be considered in as holistic a manner as possible. At the same time, goods and services must be selected in consideration of the reduction of the environmental impact throughout the product lifecycle from resource acquisition to disposal. With regards to areas with specific environmental issues such as local air pollution, such local environmental issues may be considered with priority in making purchasing decisions.

(3) Respecting Article 11 of Act on Green Purchasing, each institution shall take care that the purchase of environmental goods and services based on Act on Green Purchasing does not increase the total purchasing amount of goods and services. Each institution shall strive to use goods and services reasonably in order to keep the total purchasing amount of goods and services to a minimum. Additionally, each institution shall strive to realize the expected reduction of environmental impact of the purchased environmental goods and services, considering their long-term use, proper use and separate disposal.

Additionally, each institution shall carefully consider that green purchasing does not pose unnecessary impediment on international trade, taking compliance with the WTO Agreement on Government Procurement (particularly the stipulations of Article 10, Technical Specifications and Tender Documentation) into full account.

2. Designated Procurement Items, Evaluation Criteria, and Basic Matters Relating to the Promotion of the Procurement of Designated Procurement Goods

2.1 Basic Approach

2.1.a Setting Procurement Targets for Goods Meeting the Criteria

Each fiscal year, each institution shall establish targets of the procurement of goods and services meeting the evaluation criteria for each designated procurement item (hereinafter referred to as "designated procurement goods").

2.1.b Character of Evaluation Criteria etc.

Though it is preferable to take into account the reduction of environmental impact over the entire product lifecycle when making green purchasing decisions, evaluation criteria for each designated procurement item shall be established on clear matters including the use of numerical criteria, so as to use them as objective guideline for the actual purchase of eco-friendly goods and services.

Additionally, while each eco-friendly good makes a corresponding contribution toward reducing environmental impact, the evaluation criteria are established to clarify the goods and services included in the procurement targets set by each institution each fiscal year in its procurement policy, and to be used as one of the standard for the promotion of green purchasing. Therefore, goods and services meeting the evaluation criteria are neither the only ones that contribute to environmental conservation, nor the only ones recommended for purchase. It is preferable for each institution to strive to purchase goods and services not only meeting the evaluation criteria but also contributing to the reduction of environmental impact to the greatest extent possible, taking into account a variety of environmental factors over the entire product lifecycle in line with Basic Approach toward the Promotion of Green Purchasing. .

Furthermore, factors which are important for reducing environmental impact but are not appropriate to be set as uniform evaluation criteria at the present time are specified as "factors for consideration" to be considered in addition to the evaluation criteria when making purchasing decisions. Each institution should specify the factors for consideration as concrete and explicit specifications for each procurement, when applying the factors for consideration to their procurement, in order to ensure transparency and fairness to the procurement process.

Because these evaluation criteria are set in terms of reduction of environmental impact, needless to say, it is necessary to separately ensure the general matters, such as quality, functionality etc., and appropriate price expected to purchased goods and services .

2.1.c Revising and Adding Designated Procurement Items and Evaluation Criteria

The designated procurement items and evaluation criteria shall be revised as appropriate, considering the progress of development and popularization of the designated procurement goods and accumulation of scientific knowledge.

Future revisions and additions to the designated procurement items and evaluation criteria shall be made in accordance with the appropriate procedures as stipulated in Act on Green Purchasing, and also incorporate the opinions of experts from the academic and business worlds, while ensuring transparency.

2.1.d Approach toward Public Works

Public works account for a large share of each institution's procurement, and have a large impact on the national economy. Additionally, it is believed that the Government's initiative to conduct public works by methods which contribute to reduce environmental impact promote effectively the same approaches conducted by local governments and private enterprise. Therefore, public works that contribute to reduction of environmental impact are included in designated procurement items relating to services, and this type of procurement shall be actively promoted in accordance with the following points.

As constructions (including architectural structures) as the aim of public works are directly linked to the lives of the people, long term safety and functionality of those constructions must be ensured. Therefore, special considerations to the strength, durability, and functionality of materials as the components of public works are needed, based on the specific characteristics of the project concerned. Additionally, it is also taken into account that minimizing the costs of public works projects is severely required from the point of the appropriate use of the institution's budget. More appropriate procurement targets will be considered respecting the difference between types of usage of materials due to the objective of each project, the purpose of each structure, the difficulty of construction, etc., and the limitation of the areas and/or quantities of materials available for public works.

There are many possible ways to reduce the environmental impact of public works in addition to material utilization, such as the construction methods with low environmental impact. The issue shall be considered from a holistic viewpoint spanning the entire lifecycle of the public works project.

2.2 Designated Procurement Items and Evaluation Criteria

See Appendix.

2.3 Eco-friendly Goods Other than Designated Procurement Goods

The purchase of eco-friendly goods other than the designated procurement items shall also be promoted by specifying the matters about the wide range of those goods and setting concrete procurement targets as far as possible in the procurement policy, considering the status of the administrative task or project.

In particular, as to services category, each institution shall strive to take up services in which some of designated procurement goods are used in their own procurement policy even if the services are not listed in this basic policy as designated procurement items, because those services are thought to have a big potential to reduce environmental load.

It is also important for each institution to extend its efforts to reduce environmental impact to custom built or ordered goods and services beyond ordinary commercially available products and services. It is therefore preferable to incorporate those special goods and services into the procurement policy and study the possibility of reducing environmental impact at as early a stage as possible, including the planning stages.

In addition, each institution shall strive to decrease environmental load generated not only from the procured goods themselves but also from the procurement process as much as possible, requiring the use of fuel-efficient and/or low pollution vehicle, the use of an appropriate size vehicle according to the amount of procured goods, simplification of the documents to be submitted within the enforceable range.

3. Other Important Matters Regarding the Promotion of Green Purchasing

3.1 About Procurement Promotion System

Each institution shall establish a system for promoting green procurement. As a rule, this system shall be managed by a person with the ability to exercise control over all of the institution's internal green purchasing. (In the case of government ministries and agencies, the system shall be managed by the equivalent of a Director (Director-General), or higher). All organizations belonging to an institution shall participate in the system. Note that environmental departments and accounting/procurement departments must independently contribute to this process. Each institution shall clearly describe a concrete green purchasing promotion system in its purchasing policy.

3.2 Scope of Procurement Policy Application

As a rule, the procurement policy shall be applied to all organizations belonging to the institution. However, in the case of specific departments where it is not feasible to uniformly promote green purchasing, a separate procurements policy shall be created for those departments, after clearly noting the reasons in the procurement policy. Each institution shall clearly note the scope of its application in the procurement policy.

3.3 Publication of Procurement Policy, Summery of Procurement Track Record, and Methods Therein

Publication of procurement targets of environmental goods and services each fiscal year through publication of procurement policy assumed to lead the supply of eco-friendly goods and services by the enterprises from the demand side. Additionally, in order to successfully promote green purchasing, it is necessary to accurately grasp the procurement track record, which will be reflected to procurement policy, and to show the summery of record in an easy-to-understand format to clarify the progress of green purchasing objectively.

3.4 Establishment of Committee of Related Government Ministries and Agencies, etc.

A committee of government ministries and agencies, etc. shall be formed to enhance communication between organizations and to study policies for the promotion of green purchasing so as to facilitate green purchasing effectively.

3.5 Employee Training and Other Educational Activities for the Promotion of Green Purchasing

Training, seminars, and other educational activities shall be actively implemented to give employees, especially those in charge of procurement, a greater awareness and practical knowledge concerning the promotion of green purchasing.

3.6 Utilization and Provision of Information about Eco-friendly Goods and Services

A wide variety of information about eco-friendly goods and services is already available, including various environmental labels and product environmental information database. Therefore, each institution shall try to utilize information from environmental labels provided by third-party organization, such as Eco-Mark and Eco-Leaf, while taking into account its appropriateness, including reliability of information and transparency of its procedures. And each institution shall strive to purchase goods and

services which contribute to reduce environmental load to the greatest extent possible, referring to the Carbon Offset Attestation Label and the Carbon Footprint Mark, which are recent programs for the reduction of Greenhouse gas emission. The Government shall strive to provide and spread the appropriate information about eco-friendly goods and services as to promote the green purchasing by the governmental organizations, businesses and citizens. Moreover, the business, each institution and other concerned parties shall strive to ensure the reliability within the procurement of designated procurement goods.

Appendix

1. Terminology

In this Appendix, the terms "evaluation criteria" and "factors for consideration" are used with the following meanings:

Evaluation Criteria
The requirement as "specified procurement goods" stipulated in Article 2, Paragraph 2 of Act on Promotion of Procurement of Eco-friendly Goods and Services by the State and Other Entities.
Factors for Consideration
While not criteria required for specified procurement goods, theses factors should preferably be taken into account when purchasing eco-friendly goods.

2. Paper

(1) Items and Evaluation Criteria

Information Paper

Copier paper	**Evaluation Criteria** (1) The composite rating obtained by using the following numbers in the formula in note 5 must be 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber obtained from thinning and others, proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, degree of bleaching, and weight per unit to be used for material. (2) If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (3) The composite rating and its breakdown (index or additional rating, as well as rating for each index item) must be listed on the product. When it is not possible to list the rating and its breakdown on the product, the information must be readily available on website, etc., which should be clearly noted. **Factors for Consideration** (1) The recycled pulp content is as high as possible. (2) When virgin pulp is used as material, the pulpwood must be produced from forests that are operated using sustainable

	methods. The content of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others is to be as high as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Pulp used in accordance with method of procurement of materials with sustainable goals***, denotes one of the following:
    a. Pulp used in accordance with policies for procuring pulpwood only from those forests which are operated in accordance with the viewpoint to use forest material both cyclically and sustainably by maintaining the diverse functions of the forests, while not contributing to the deterioration of the forest or the reduction of forest area, and which maintain environmental excellence, including preservation of biodiversity, and social excellence, including consideration for health and safety of workers.
    b. Pulp used in accordance with policies for procuring recycled and unused pulpwood that would contribute to the effective application of resources (scrap wood, pulpwood derived from construction, lower standard pulpwood (leftover pulpwood from forestry, shrubbery, tree root, pulpwood obtained from logs affected by vermin and natural disasters, bent material, material with small diameter, etc.) and fiber from waste plants).
2. ***Lumber obtained from thinning and others*** denotes lumber obtained from thinning and bamboo.
3. ***Index item*** denotes content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber obtained from thinning and others proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, degree of bleaching, and weight per unit to be used for material. ***Proportion of pulp content that is used in accordance with material procurement with sustainable goals*** denotes pulp to be used in accordance with material procurement with sustainable goals, with the exception of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others.
4. ***Composite rating*** stands for the amount Y listed in note 5.
   Index stands for amount per index item for x1, x2, x3, x4 as listed in note 5;
   Additional rating stands for amount per index item for x5, x6 as listed in note 5.
   Rating stands for the amount calculated in accordance with formulas for y1, y2, y3, y4, y5 as listed in note 5.
5. Composite rating, rating, index, and additional rating are to be derived from the following:
   $Y = (y1+y2+y3)+y4+y5$
   $y1 = x1-20 \ (70 \leq x1 \leq 100)$
   $y2 = x2+x3 \ (0 \leq x2+x3 \leq 30)$
   $y3 = 0.5 \times x4 \ (0 \leq x4 \leq 30)$
   $y4 = x5+75 \ (60 \leq x5 \leq 75, \ x5<60 \rightarrow x5=60, \ x5>75 \rightarrow x5=75)$
   $y5 = -2.5x6+170 \ (62 \leq x6 \leq 68, \ x6<62 \rightarrow x6=62, \ x6>68 \rightarrow x6=68)$

Y and y1, y2, y3, y4, y5, x1, x2, x3, x4, x5, x6 stand for the following amount.
Y (composite rating): the sum of y1, y2, y3, y4, y5 with the amount below decimal point eliminated.

y1: calculated rating for recycled pulp content, rounded to one decimal place.
y2: calculated rating for the content of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others, rounded to one decimal place.
y3: calculated rating for proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, rounded to one decimal place.
y4: calculated sum of degree of bleaching, rounded to one decimal place.
y5: calculated sum of weight per unit, rounded to one decimal place.
x1: content ratio of recycled pulp satisfying minimal guarantee (%)
x2: content ratio of pulp certified by forest certification system (%)
x2 = (pulp certified by forest certification system/ virgin pulp) x (100-x1)
x3: content ratio of pulp manufactured with lumber obtained from thinning and others (%)
x3 = (pulp manufactured with lumber obtained from thinning and others/ virgin pulp) x (100-x1)
x4: content ratio of pulp that satisfy other sustainable goals (%)
x4 = (pulp that satisfy other sustainable goals / virgin pulp) x (100-x1)
x5: degree of bleaching (%)
degree of bleaching is to be determined as management standard per each product lot at the time of production. Amounts within 3% of management standard are to be allowed. When coloring occurs with purposes other than to match the lot color (when bleaching is done intentionally) does not count towards additional points.
x6: weight per unit (g/m2)
weight per unit is to be determined as management standard per each product lot at the time of production. Amounts within 5% of management standard are to be allowed.

6. As copy paper with low weight per unit has a relatively high risk of curling, jamming, and tearing at the time of copying, it is necessary to pay attention when procuring paper with low weight per unit.
7. When using copier paper for the copiers and the printers, each procurement organization must confirm the printability and print quality based on information offered by the paper manufacturer making public on the product or website.
8. Confirmation of the legality and the sustainability of the forest where pulpwood producing paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.
9. Confirmation of lumber obtained from thinning to be used for pulp is to be done in

accordance with the Forest Agency's "Guidelines for confirming thinning wood chips (February 13, 2009)."

10. As paper is produced from a mixture of multiple wood chips, it is permissible to take into consideration the difficulty of securing the actual proportion for each product during the manufacturing process, and use the credit method that is in accordance with "Operation guidelines for credit method for pulp certified by forest certification system, and pulp manufactured with lumber obtained from thinning (February 13, 2009)", stipulated by Ministry of Environment.
Credit method refers to a method whereby the appropriate use of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others are determined for each product, in accordance to the amount of usage for the two types of pulp in relation to other types of material used in a given time, without consideration for whether or not it is actually used in individual product.

Forms	**Evaluation Criteria** (1) 70% recycled pulp content and no more than approximately 70% bleaching. (2) If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (3) If coated, coating on both sides totaling no more than 12 g/m2. **Factors for Consideration** (1) If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Coated inkjet color printer paper	**Evaluation Criteria** (1) At least 70% recycled pulp content. (2) If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This

	does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (3) Coating on both sides totaling no more than 20 g/m2, coating on one side no more than 12 g/m2. **Factors for Consideration** (1) If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

Confirmation of the legality and the sustainability of the forest where pulpwood producing paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)"

In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

Printing Paper

Non coated printing paper Coated printing paper	**Evaluation Criteria** (1) Must fulfill one of the following. a. For non coated printing paper, the composite rating obtained by using the following numbers in the formula in note 5 must be 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber obtained from thinning and others, proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, and degree of bleaching to be used for material. b. For coated printing paper, the composite rating obtained by using the following numbers in the formula in note 5 must be 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber obtained from thinning and others, proportion of pulp content that is used in accordance with method of material

	procurement with sustainable goals, and amount of coating to be used for material. (2) If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (3) The composite rating and its breakdown (index or additional rating, as well as rating for each index item) must be readily available on website etc. (4) Not processed in a way that makes difficult to recycle. **Factors for Consideration** (1) The recycled pulp content is as high as possible. (2) When virgin pulp is used as material, the pulpwood must be produced from forests that are operated using sustainable methods. The content of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others is to be as high as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Pulp used in accordance with method of procurement of materials with sustainable goals***, denotes one of the following:
    a. Pulp used in accordance with policies for procuring pulpwood only from those forests which are operated in accordance with the viewpoint to use forest material both cyclically and sustainably by maintaining the diverse functions of the forests, while not contributing to the deterioration of the forest or the reduction of forest area, and which maintain environmental excellence, including preservation of biodiversity, and social excellence, including consideration for health and safety of workers.
    b. Pulp used in accordance with policies for procuring recycled and unused pulpwood that would contribute to the effective application of resources (scrap wood, pulpwood derived from construction, lower standard pulpwood (leftover pulpwood from forestry, shrubbery, tree root, pulpwood obtained from logs affected by vermin and natural disasters, bent material, material with small diameter, etc.) and fiber from waste plants).
2. ***Lumber obtained from thinning and others*** denotes lumber obtained from thinning and bamboo.
3. ***Index item*** denotes content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber obtained from thinning and others, proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, degree of bleaching, and amount of coating to be

used for material. ***Proportion of pulp content that is used in accordance with material procurement with sustainable goals*** denotes pulp to be used in accordance with material procurement with sustainable goals, with the exception of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others.

4. ***Composite rating*** stands for the amount Y1 or Y2 listed in note 5.
   Index stands for amount per index item for x1, x2, x3, x4 as listed in note 5;
   Additional rating stands for amount per index item for x5, x6 as listed in note 5.
   Rating stands for the amount calculated in accordance with formulas for y1, y2, y3, y4, y5 as listed in note 5.
5. Composite rating, rating, index, and additional rating are to be derived from the following:
   Y1 = (y1+y2+y3)+y4
   Y2 = (y1+y2+y3)+y5
   y1 = x1-10 (60≤x1≤100)
   y2 = x2+x3 (0≤x2+x3≤40)
   y3=0.5 x x4 (0≤x4≤40)
   y4=-x5+75 (60≤x5≤75, x5<60→x5=60, x5>75→x5=75)
   y5=-0.5x6+20 (0≤x6≤10→x6=10, 10≤x6≤20→ x6=20,20≤x6≤30→ x6=30, x6>30→ x6=40)
   Y1, Y2 and y1, y2, y3, y4, y5, x1, x2, x3, x4, x5, x6 stand for the following amount.
   Y1 (composite rating of non coated printing paper): the sum of y1, y2, y3, y4 with the amount below decimal point eliminated.
   Y2 (composite rating of coated printing paper): the sum of y1, y2, y3, y5 with the amount below decimal point eliminated.
   y1: calculated rating for recycled pulp content, rounded to one decimal place.
   y2: calculated rating for the content of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning, rounded to one decimal place.
   y3: calculated rating for proportion of pulp content that is used in accordance with method of material procurement with sustainable goals, rounded to one decimal place.
   y4: calculated sum of degree of bleaching, rounded to one decimal place (not applied for colored printing paper or fancy paper (including fine quality of colored paper and general colored paper used colorant)).
   5 point adding in case of colored printing paper and fancy paper of Rank A (the one not obstructed in recycling to printing paper) that meet the criteria of "printing" (refer to ***printing*** section), there is no adding point for other paper.
   y5: calculated sum of amount of coating, rounded to one decimal place.
   x1: content ratio of recycled pulp satisfying minimal guarantee (%)
   x2: content ratio of pulp certified by forest certification system (%)
   x2 = (pulp certified by forest certification system / virgin pulp) x (100-x1)
   x3: content ratio of pulp manufactured with lumber obtained from thinning and others (%)
   x3= (pulp manufactured with lumber obtained from thinning and others / virgin pulp) x (100-x1)
   x4: content ratio of pulp that satisfy other sustainable goals (%)
   x4= (pulp that satisfy other sustainable goals / virgin pulp) x (100-x1)

x5: degree of bleaching (%)
degree of bleaching is to be determined as management standard per each product lot at the time of production. Amounts within 3% of management standard are to be allowed. When coloring occurs with purposes other than to match the lot color (when bleaching is done intentionally) does not count towards additional points.

x6: amount of coating (g/m2)
amount of coating (coating on both sides) is to be determined as management standard per each product lot at the time of production.

6. When using printing paper for the copiers and the printers, each procurement organization must confirm the printability and print quality based on information offered by the paper manufacturer making public on the product or websites.
7. Confirmation of the legality and the sustainability of the forest where pulpwood producing paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)". In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.
8. Confirmation of lumber obtained from thinning to be used for pulp is to be done in accordance with "Guidelines for confirming thinning wood chips (February 13, 2009)."
9. As paper is produced from a mixture of multiple wood chips, it is permissible to take into consideration the difficulty of securing the actual proportion for each product during the manufacturing process, and use the credit method that is in accordance with "Operation guidelines for credit method for pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning (February 13, 2009)", stipulated by Ministry of Environment.
Credit method refers to a method whereby the appropriate use of pulp certified by forest certification system and pulp manufactured with lumber obtained from thinning and others are determined for each product, in accordance to the amount of usage for the two types of pulp in relation to other types of material used in a given time, without consideration for whether or not it is actually used in individual product.

Hygienic Paper

Toilet paper	**Evaluation Criteria** 100% recycled pulp content
Tissue paper	**Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

(2) Recycled paper and the percentage of recycled paper pulp content

The definition of recycled paper and relating terms, and the percentage of recycled pulp content defining as Evaluation Criteria in each article is as follows.

<The definition of recycled paper and relating terms>

Recycled paper	Post-consumer recycled paper and pre-consumer recycled paper.
Post-consumer recycled paper	Used paper generated in shops, offices, or homes utilized as a raw material for papermaking by paper manufacturers (Papers shipped as a product to marketing channel once and returned again are included.).
Pre-consumer recycled paper	Paper generated from converting process after the papermaking process utilized as a raw material for papermaking by paper manufacturer. However, paper used by the paper manufacturers as paper material without being shipped as good prescribed hereinafter is excluded: the one generated from such as a paper converting factory, paper product factory, printing factory and binding factory of paper manufacturer, etc. (include those affiliates such as subsidiary companies and related companies) and the one when converting at the mills or operational sites that uses paper as raw material and also those of generated from in case of converting by other business operators commissioned by paper manufacturers before shipping products (If the ownership of the paper material has transferred to the third party from the proper paper manufacturers, it will be treated as recycled paper, except intentionally attempted to handle mill broke as recycled paper.).
Mill broke	The one that corresponds as follows. •Paper generated during the paper making process, and directly returned to the papermaking process to use as a papermaking material (so called ***Flowing Mill Broke.*** Wet broke and Dry broke). •Paper kept in at the paper mills or operational sites and used as raw material (so-called ***Stored Mill Broke***). •The one provided for by ***Proviso*** in definition of the above-mentioned as pre-consumer recycled paper.
Paper	***Paper industry (142)*** specified in a middle classification by a

manufacture	classification of Japan Standard Industry Classification (No.175 of the Ministry of Internal Affairs and Communications Notification on March 23, 2009)**,** classified ***Paper manufacturing (1421), Corrugated board manufacturing (1422), Machine-made Japanese style paper (1423) and Hand-made Japanese paper manufacturing (1424)*** in the small classification.
Subsidiary companies, related companies, and affiliates	The one stipulated in each paragraph of Article 8 of ***Regulations Concerning Terminology, Forms, and Preparation Methods of Consolidated Financial Statements*** based on the regulations Article 193 of Financial Instruments and Exchange Act (Law No.25, 1948).

<The definition of the percentage of recycled paper pulp content>

The percentage of recycled paper pulp content=
recycled pulp/(virgin pulp+recycled pulp)×100(%)

Pulp containing 10% moisture is used to measure the weight.
Mill broke shall not be included in the denominator and numerator, respectively, of the calculating formula above.

(3) Target Setting Guideline

Ratio of the amount of goods of a certain type (in kg) that meets the criteria, to the total amount of goods of that type to be purchased in the fiscal year (in kg).

3. Stationery

(1) Items and Evaluation Criteria

Common to all stationery	**Evaluation Criteria** With the exception of metals, the primary material must meet, of the criteria below, (1) for plastic, (2) for wood, and (3) for paper. In addition, items whose secondary material includes wood must meet (2). Items whose secondary material include paper (with the exception of virgin pulp manufactured with lumber obtained from thinning, or with recycled wood pieces obtained from plywood or lumber factories) must meet (3)b. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (1) Recycled plastic makes up no less than 40% in weight of the total plastic used. (2) Lumber obtained from thinning, recycled wood pieces obtained from plywood or lumber factories, or lumber used as raw material that is in compliance with the regulations concerning forestry in its country of origin. The pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (3) Must fulfill the following. a. At least 50% recycled pulp content. b. If virgin pulp is used as the raw material for paper, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories material left over from forestry, or lumber with small diameter. **Factors for Consideration** (1)The recycled pulp content and recycled plastic content is as high as possible. (2)Organic solvent, or paint with as low odor as possible is used as coating. (3)If the primary material is wood, lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. Lumber obtained from thinning, or recycled wood pieces obtained from plywood or lumber factories are to be excluded. (4)If the primary material is paper, and furthermore, if virgin

	pulp is used, pulpwood that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (5)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. [Note] Evaluation Criteria and Factors for Consideration listed above apply to special procurement items that are included in stationery. For special procurement items with specific evaluation criteria (marked with ●), evaluation criteria for that item will be applied in lieu of the evaluation criteria listed above.
Mechanical pencils	**Factors for Consideration** Its design and operation is such that as low as possible an amount of unused lead is left over or un-usable each time the user supplies and replaces the lead in the mechanical pencil.
Mechanical pencil lead	**Evaluation Criteria apply to the container only**
Ball-point pens	**Factors for Consideration** Replaceable ink cartridges
Marking pens	**Factors for Consideration** Consumable parts can be replaced or refilled.
Pencils	
Ink pads	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item (excluding consumable parts). Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. **Factors for Consideration** Ink/fluid is refillable
Vermilion ink pads	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item (excluding consumable parts). Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. **Factors for Consideration** Ink/fluid is refillable

Stamp case with inkpad	**Factors for Consideration** Refillable ink
Stamp case	
Official seal	
Rubber stamp	
Date stamp	
Rulers	
Trays	
Erasers	**Evaluation Criteria apply to sleeve or case only**
Staplers(general-purpose type)	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the total plastic used (except the mechanical parts). In other cases, the item must satisfy the Evaluation Criteria common to all stationery. **Factors for Consideration** The items are designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts.
Staplers(other than general-purpose type)	**Factors for Consideration** The items are designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts.
Staple removers	
Clamp-on clip dispensers(main body)	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item (excluding replaceable parts). Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery.
Correction tape	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item (excluding replaceable parts). Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. **Factors for Consideration** Consumable parts can be replaced
Correction fluid	**Evaluation Criteria apply to the container only**

Masking tape	**Evaluation Criteria** ● Roll must be at least 40% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood use is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. **Factors for Consideration** (1) Use of soluble and dispersible adhesive in water or in the weak alkaline water solution, and no resin laminate processing. (2) If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Adhesive tapes (cloth tape)	**Evaluation Criteria** ●Recycled plastic makes up at least 40% of plastic weight for the roll (excluding laminate layer).
Double sided tapes	**Evaluation Criteria** ●Rolls must be at least 40% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood use is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. **Factors for Consideration** If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Book binding tapes	*Evaluation Criteria apply to the rolls only.*
Bookstands	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item (excluding replaceable parts). Recycled plastic that utilizes post-consumer

	material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery.
Pen stands	
Clip cases	
Scissors	**Factors for Consideration** The items are designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and, recycling, or the appropriate disposal of its separated parts.
Magnets (ball)	
Magnets (bar)	
Tape cutters	
Hole punchers (manual)	
Malt cases (sponge case)	
Paper turning cream	*Evaluation Criteria apply to the container only*
Pencil sharpeners (manual)	**Factors for Consideration** The items are designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts.
Office machine cleaner (wet paper type)	**Evaluation Criteria** *Evaluation Criteria apply to the container only* ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. **Factors for Consideration** Refillable contents
Office machine cleaner (liquid type)	**Evaluation Criteria** *Evaluation Criteria apply to the container only* **Factors for Consideration** Refillable contents
Dust blowers	**Evaluation Criteria** ●Does not use Fluorocarbons. In cases where highly combustible materials are used, adequate instruction for its handling should accompany the product.
Letter cases	
Media cases	**Evaluation Criteria** ● Must fulfill at least one of below. (1) If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must

	make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. (2) Cases for CD, DVD and BD should be a slim-type case that is 5mm or less in thickness. (3) Uses vegetable based plastics whose reductional effect of environmental load has been confirmed.
Mouse pads	
Office machine filters (with frame)	**Evaluation Criteria** ● Must fulfill at least one of below. (1) Meets the Evaluation Criteria common to all stationery, or uses vegetable based plastics whose reductional effect of environmental load has been confirmed. (2) Recycled plastic makes up more than 50% of frame weight.
Paper cutters with round blades	**Factors for Consideration** The items are designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts.
Box cutters	
Cutting mats	**Factors for Consideration** Both sides of the mat can be used.
Desk pads	
OHP film	**Evaluation Criteria** ● Must fulfill at least one of below. (1) Recycled plastic makes up at least 30% of plastic weight. (2) OHP film for inkjet printers must fulfill either the above criteria or must use vegetable based plastics whose reductional effect of environmental load has been confirmed.
Paint brushes	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery.
Paints	**Evaluation Criteria apply to the container only**
India ink	*Evaluation Criteria apply to the container only*
Glue (liquid) (including refills)	*Evaluation Criteria apply to the container only* **Factors for Consideration** Refillable contents
Glue (paste) (including Refills)	
Glue (solid) (including refills)	*Evaluation Criteria apply to the container or case only* **Factors for Consideration**

Glue (tape)	Consumable parts can be replaced
Files	**Evaluation Criteria** ● If the primary material excluding metal is paper, it must contain at least 70% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. Otherwise, item must fulfill at least one of below: (1) Meets the Evaluation Criteria common to all stationery (2) Clear holders must fulfill either the above criteria or must use vegetable based plastics whose reductional effect of environmental load has been confirmed. **Factors for Consideration** (1) Structure allows separation of cover and closing mechanism to enable reuse and recycling of components, as well as their separate disposal. (2) If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Binders	**Evaluation Criteria** ● If the primary material excluding metal is paper, it must contain at least 70% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. Otherwise, item must meet the Evaluation Criteria common to all stationery. **Factors for Consideration** (1)Structure allows separation of cover and closing mechanism to enable reuse and recycling of components, as well as their separate disposal. (2)If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from

	plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Filing supplies	
Albums	
Binding string	**Evaluation Criteria** ● Must fulfill at least one of below. (1) If the primary material is paper, recycled pulp must make up no less than 70% by weight of the entire item. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (2) If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery. (3) Otherwise, item must meet the Evaluation Criteria common to all stationery. **Factors for Consideration** If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Card cases	
Business envelopes (paper product)	**Evaluation Criteria** ● No less than 40% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. **Factors for Consideration** If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. If virgin pulp is used as the raw material, the

	pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Envelopes with windows (paper product)	**Evaluation Criteria** ●No less than 40% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (Criteria regarding recycled pulp content does not apply to windows that are made of paper.) ●For envelopes with windows made of plastic film product, the film must contain no less than 40% recycled plastic, or use vegetable based plastics whose reductive effect of environmental load has been confirmed. **Factors for Consideration** If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Graph paper Drafting paper	**Evaluation Criteria**

Notebooks	● No less than 70% recycled pulp content. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. ●Coated paper: both sides totaling no more than 30 g/m2; for non-coated paper, no more than approximately 70% bleaching. **Factors for Consideration** If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter.
Reinforcement labels for hole-punch pages	**Factors for Consideration** Use of soluble and dispersible adhesive in water or in the weak alkaline water solution, and no resin laminate processing.
Adhesive labels Indexes	**Evaluation Criteria** ● If the primary material is paper, recycled pulp must make up no less than 70% by weight of the entire item (excluding the

Self-stick removable notes	adhesive portion). If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. Otherwise, item must meet the Evaluation Criteria common to all stationery. **Factors for Consideration** (1) If virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (2) Use of soluble and dispersible adhesive in water or in the weak alkaline water solution, and no resin laminate processing.
Self-stick removable film	**Factors for Consideration** Use of soluble and dispersible adhesive in water or in the weak alkaline water solution.
Blackboard erasers	
Whiteboard erasers	
Picture frames	
Waste bins	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery.
Recycling boxes	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic must make up no less than 70% by weight of the entire item. Recycled plastic that utilizes post-consumer material must make up no less than 60% by weight of the entire item. In other cases, the item must satisfy the Evaluation Criteria common to all stationery.
Can and bottle crushers	
Name plates (desktop)	

Name tags (pin or string)	
Key hooks	
Chalks	**Evaluation Criteria** ● Recycled material must make up no less than 10% of the entire product by weight.
Field Lines	**Evaluation Criteria** ● Recycled material must make up no less than 70% of the entire product by weight.
Packing Bands	**Evaluation Criteria** ●If the primary material is paper, recycled paper must make up 100% of the entire item. ●If the primary material is plastic, recycled plastic that utilizes post-consumer material must make up no less than 25% by weight of the entire item. Material recycled products from pet bottles are excluded.

Note:

1. ***Stapler (general-purpose type)*** under consideration in the Evaluation Criteria in this section denotes handy-type one that use the No.10 staples by JIS S 6036-2. ***Stapler (other than general-purpose type)*** denotes other than Stapler (general-purpose type) and includes those that do not use staples.
2. ***File*** includes types for paper with holes (flat file, pipe-style file, binder, fastener, cap-style file for computer printouts) and types for paper without holes (folder, holder, box file, document file, transparent pocket file, scrap book, z-type file, clip file, letterhead holder, drawing file, case file, etc.).
3. ***Binder*** includes MP binder, ring binder, etc.
4. ***Filing supplies*** include spine labels, file pockets, and dividers to be used with files and binders.
5. The definition of ***Recycled paper*** and ***The percentage of recycled paper pulp content*** is according to "2. Paper (2) Recycled paper and the percentage of recycled paper pulp content" in this Basic Policy.
6. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
7. ***Post-consumer material*** denotes material or product that has been disposed of after being used as a product.
8. ***Plastics whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
9. Evaluation Criteria for stationery has been determined for products whose primary material other than metal is plastic, wood, or paper. Under consideration in the evaluation criteria, it does not include products whose primary material is metal and does not use plastic, wood, or paper.
10. ***Consumable part*** denotes parts that wear out with use. For replaceable consumable

parts (i.e. cartridges), the entire replaceable portion is to be excluded from the total product weight. For non-replaceable consumable parts (one-way), only the appropriate portion (i.e. ink) it to be excluded from the total product weight.

11. ***Adhesive part*** denotes the surface of labels, etc., that are treated with a pressure sensitive adhesive. The adhesive and the backing paper or material is to be excluded from the total product weight.
12. ***Fluorocarbons*** under consideration in the Evaluation Criteria for Dust blowers are defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001). Available materials include Carbon Dioxide, Dimethyl Ether and Hydro-Fluoro-Olefin (HFO-1234_{ze}).
13. Evaluation Criteria for Dust blowers apply to the designated products prescribed in Article 2, Paragraph 2 of the Act for Rationalized Use and Proper Management of Fluorocarbons (Act No. 64 of 2001).
14. ***Media cases*** under consideration denotes dose for use with CD, DVD and BD.
15. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
    In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

(2) Target Setting Guideline

Ratio of the number of goods of a certain type that meets the criteria, to the total number of goods of that type to be purchased in the fiscal year.

4. Office Furniture, etc.

(1) Items and Evaluation Criteria

Chairs Desks Shelves Storage furniture (without shelf) Low partitions Coat hangers Umbrella stands Bulletin boards Blackboards Whiteboards	**Evaluation Criteria** Shelves and storage furniture comprised primarily of metal should fulfill requirements outlined in (1) and (5). For all other products, one of the following should be met. Products whose primary material aside from metal is plastic, wood and paper should fulfill the requirements outlined in (2) and (5), (3) and (5), and (4) and (5), respectively. For products that include wood as a non-primary material should fulfill (3) a; products that include paper as a non-primary material should fulfill (4) b. (1) Products included in Table 1 must fulfill both a. b. and c listed below. Other products must fulfill both b. and c. listed below. a. Does not exceed criteria listed in Table 1 for each category. b. Ratio of dismantle-possibility into single material must be 85% or higher. c. Takes into account environmentally conscious design noted in Table 2 for each evaluation criteria. (2) Recycled plastic makes up at least 10% by weight; otherwise, vegetable based plastics whose reductive effect of environmental load has been confirmed makes up at least 25% by weight of total plastic used. (3) Must fulfill the following: a. Lumber obtained from thinning, recycled wood pieces obtained from plywood or lumber factories, or virgin pulp used as the raw material must be in compliance with the regulations concerning forestry in its country or geographical area of origin. b. Discharge rate of formaldehyde from materials is no greater than 0.02 mg/m²h, or the equivalent. (4) Must fulfill the following: a. At least 50% recycled pulp content. b. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (5) Supply of the service parts and spare parts shall be continued

	for 5 years or more after the termination of product manufacturing. **Factors for Consideration** (1) Designed for long-term use, taking into account maintenance, repair and the replaceability of parts that wear. Designed to enable component reuse and easy disassembly for refurbishment and recycling, or the appropriate disposal of the separated parts after the item's useful life. Special care taken in the design of item's metal components to enable long-term use, conservation of resources, and reuse of materials, based on the evaluation criteria of the Law to Promote Effective Use of Resources (Law No. 48 of 1991). (2) Organic solvent, or paint with as low odor as possible such as powder paint and water-based paint is used as coating. (3) A system for collection and reuse/recycling of used products, and a system for the proper disposal of components which cannot be reused or recycled is considered. (4) If wood is one of the materials used in the product, lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories. (5) If paper is one of the material used in the product, and furthermore, if virgin pulp is used, pulpwood that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by lumber using recycled wood pieces obtained from plywood or lumber factories. (6) Packaging and stowage is made as simple as possible, and takes into account ease of recycling and reduced environmental impact upon disposal. (7) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***White board*** under consideration in the evaluation criteria in this section includes all types of writing boards excluding chalk boards.
2. ***Comprised primarily of metal*** indicates that metal used for the product comprises 95% or more of the total product by weight.
3. ***Ratio of dismantle-possibility into single material*** in Evaluation Criteria (1) will be determined using the following formula.

Ratio of dismantle-possibility into single material = number of parts that can be dismantled into a single material / number of parts in the product x 100

Parts to which one of the following is applicable will not be included when calculating ratio of dismantle-possibility into single material.

a. Parts used to prevent overturning due to theft, earthquakes or as a part of the operating process (includes locks, overturning prevention parts, drawer guide-rails, etc.).
b. Parts that maintain sections that project from the main product (hinges, drawer guide-rails, etc.).
c. Accessory bolts used to secure or connect a part that meet the Japan Industrial Standards or its equivalent.

4. The definition of ***Recycled paper*** and ***The percentage of recycled paper pulp content*** is according to "2. Paper (2) Recycled paper and the percentage of recycled paper pulp content" in this Basic Policy.
5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
6. ***Vegetable based plastics whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
7. Discharge rate of no greater than 0.02 mg/m²h, or the equivalent, denotes the following. Office furniture-Desks and Tables that fills standard of JIS S 1031, Office furniture-Chairs that fills standard of JIS S1032, Shelves and Racks that fills standard of JIS S 1039 and Office furniture-Storage cabinets that fills standard of JIS S 1033 meet this criteria.
    a. Wood material with a corresponding Japan Industrial Standard or Japan Agricultural Standards, whose criteria for formaldehyde discharge is regulated, must meet the criteria for F☆☆☆.
    b. Wood material that do not qualify for the standards outlined in item (a.) above must satisfy the below numbers when evaluated according to the method determined by JIS A1460.

Average	Maximum
0.5 mg/L	0.7 mg/L

8. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
   In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

Table 1: Function weight criteria for bookcase shelves and office storage furniture shelves comprised primarily of metal

Categories	Criteria
Shelves of storage furniture (excluding those for special purposes such as medical chart storage)	0.1
Shelves of bookcases, lightweight shelving systems, and mid-weight shelving systems	0.1

Note: the formula for calculating the function weight criteria to use for shelves is as follows:
Function weight criteria = shelf weight (kg) / shelf resistance load (kg)

Table 2: Items for environmentally conscious design concerning bookcases and storage furniture comprised primarily of metal

Purpose	Evaluation items	Evaluation criteria
Design with consideration for reduction	Reduction of raw material use	Use of raw material is reduced.
	Reduction of weight, use of light-weight material	Reduction of weight, use of light-weight material is taken into consideration for parts and material.
Design with consideration for recycling	Use of recyclable material	Material that can be recycled is used.
	Consideration for the ease of separating and dismantling reusable parts	Assembly takes into consideration the ease of separating and dismantling reusable parts.
		All other parts can be easily taken apart.
	Use as recycled resource	Material used in the synthetic resin portion is listed.
		Design takes into consideration separation of material.

(2) Target Setting Guideline
Ratio of the number of goods of a certain type that meet the criteria, to the total number of goods of that type to be purchased in the fiscal year.

5. Imaging Eqipments, etc.

5-1.Copiers, etc.

(1) Items and Evaluation Criteria

Copiers Multifunction devices Upgradeable digital copiers	**Evaluation Criteria** **<Common Criteria>** **(1)** The papers which meet the criteria for specified procurement goods are acceptable if the papers belong to the specified procurement items. (2) Fulfills one of the following. a. Copiers, multifunction devices, and upgradeable digital copiers with consideration for reuse (hereinafter referred to as copiers, etc.). b. Contents of specified chemical substances do not exceed the standard content rate. (3) Systems for the collection of used device, recovery of parts and/or material recycling are put in place. Parts which cannot be reused or recycled are reduced in volume, and the rests are treated properly, are not landfilled directly. **<Individual Criteria>** (1) Copiers and Upgradeable digital copiers a. Monochrome copiers and upgradeable digital monochrome copiers (excluding large format devices) meet the standards of the applicable category in Table 1-1. b. Color copiers and upgradeable digital color copiers (excluding large format devices) meet the standards of the applicable category in Table 1-2. c. Large format copiers or upgradeable large format digital copiers meet the standards of the applicable category in Table 3. (2) Multifunction devices(excluding inkjet type) a. Monochrome multifunction devices (excluding large format devices) meet standards of the applicable category in Table 2-1. b. Color multifunction devices (excluding large format devices) meet standards of the applicable category in Table 2-2. c. Large format multifunction devices meet standards of the applicable category in Table 3. **Factors for Consideration** (1) Batteries do not include cadmium alloys, zinc alloys, or mercury alloys. This requirement does not have to be met, if batteries including these substances are collected, reused, or recycled without failure, and/or properly processed. (2) Design takes into consideration the reuse of components,

	based on the evaluation criteria of the Law to Promote Effective Use of Resources. Especially, if the components include rare metals, reusing them should be taken into consideration when designing the products. (3) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment and reuse. (4) The item uses as large amount of recycled plastic as possible if plastic components are used. (5) Paper-saver features are equipped. (6) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (7) A system for collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Multifunction Devices*** denote products that have one or more function of print, scan, or fax in addition to copier function.
2. ***Copiers, etc. with consideration for reuse*** denotes those machines created through a system for which reuse is accounted for during manufacture, and refers to ***recycle type machine*** and ***partial reuse type machine***.
   (1) ***Recycle type machine*** denotes products that are produced by disassembling, cleaning, and repairing used products, replacing those parts that are not of the same quality as a new one or do not meet a set criteria, and assembling them on an exclusive line.
   (2) ***Partial reuse type machine*** denotes products that are produced by disassembling, cleaning, and repairing used products, and assembling those parts that can be guaranteed the same quality as a new one on an assembly line that is the equivalent of a new product.
3. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
4. ***The standard content rate of specified chemical substances*** denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
5. ***Material recycling*** denotes recycling materials into materials. It does not include energy recovery, degradation to oil, gasification, use as feedstock of reduction reaction in the blast-furnace and of coke furnace.
6. ***Large format devices*** include those designed for A2 size media and larger, including those designed to accommodate continuous-form media at a width of 406 millimeters (mm) or wider.
7. ***Rare metals*** refers to the 31 types of metals (the seventeen rare earth elements are considered as one metal type) specified at the Special Meeting for the Comprehensive Assessment of Rare Metals at the Mining Panel of the Ministry of Economy, Trade

and Industry.

8. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.).
9. Copiers, etc. with consideration for reuse may not be guaranteed to have a stable product supply, due to the fact that their production involves recovery of used material, which is supplied to its production only after a strict quality inspection. For the purposes of procurement in the case where each organization requires bidding conditions other than the fact that it is a specified procurement, it is necessary to make a note of (2) a and b in the Common Criteria.
10. For the procurement of copiers, etc. that involves consumables that is comprised of an independent toner container, and when it fulfills Evaluation Criteria (5) of "toner cartridge" titled "Chemical safety of toner is confirmed," they will be handled in the same way as specified procurements.
11. As for Evaluation Criteria <Common Criteria> (1), as a precondition, papers are required not to have negative effect on the machine, and are able to be used for the print quality without trouble.
12. Due to the considerable amount of time necessary until the recovery of used products, individual criteria for copiers, etc. with consideration for reuse will be considered specified procurements if they fulfill appropriate criteria outlined in Tables 5-1 to 5-6. This is until products that fulfill criteria outlines in Tables 1-1, 1-2, 2-1, 2-2 and 3 will be supplied in the market. The time period will be determined based on the observation of the market trends.

Table 1-1: Standards for energy consumption for monochrome copiers and Upgradeable digital monochrome copiers (excluding large format devices)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm ≤5	≤0.3	Not applied
5 < ipm ≤20	≤ 0.04 × ipm+0.1	
20 < ipm ≤24	≤ 0.06 × ipm－0.3	
24 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <37	≤ 0.11 × ipm－1.8	
37 ≤ ipm ≤40		Integral to the base product
40 < ipm ≤65	≤ 0.16 × ipm－3.8	
65 < ipm ≤90	≤ 0.2 × ipm－6.4	
90 < ipm	≤ 0.55 × ipm－37.9	

Note:

1. ***Product speed*** is the maximum, nominal, and one side print speed when the black and white image is generated, and the ipm speed calculated in all cases is rounded off to the nearest integer. 1ipm (number of images for each amount) is equal to single A4 size or 8.5" x 11" sheet printed on one side. If the maximum claimed speeds differ when producing images on A4 size or 8.5" x 11" paper the higher of

two shall be used. Same applies for Tables 1-2, 2-1, 2-2 and 3 below.

2. Products for A3-capable (Standard format products with a paper path width equal to or greater than 275 mm.) are a 0.3 kWh/wk allowance standards of the applicable category in the Tables. Same applies for Tables 1-2, 2-1, and 2-2 below.
3. Measuring method for standard energy consumption shall be measured in accordance with "International ENERGY STAR Program Requirements, Product Specification for Imaging Equipment, Eligibility Criteria Version 2.0." Same applies for Tables 1-2, 2-1 and 2-2 below.

Table 1-2 : Standards for energy consumption for Color copiers and Upgradeable digital color copiers (excluding large format devices)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm ≤ 10	≤ 1.3	Not applied
10 < ipm ≤ 15	≤ 0.06×ipm+0.7	
15 < ipm ≤ 19	≤ 0.15×ipm－0.65	
19 < ipm ≤ 30		Integral to the base product or optional accessory
30 < ipm <35	≤ 0.2×ipm－2.15	
35 ≤ ipm ≤75		Integral to the base product
75 < ipm	≤ 0.7×ipm－39.65	

Table 2-1: Standards for energy consumption for Monochrome multifunction devices (excluding large format devices)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm ≤5	≤0.4	Not applied
5 < ipm ≤24	≤0.07×ipm+0.05	
24 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <37	≤0.11×ipm－1.15	
37 ≤ ipm ≤50		Integral to the base pro Duct
50 < ipm ≤80	≤0.25×ipm－8.15	
80 < ipm	≤0.6×ipm－36.15	

Table 2-2 : Standards for energy consumption for Color multifunction devices (excluding large format devices)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm ≤ 10	≤1.5	Not applied
10 <ipm ≤15	≤0.1×ipm+0.5	
15 <ipm ≤19	≤0.13×ipm+0.05	
19 <ipm ≤30		Integral to the base product or optional accessory
30 <ipm <35	≤0.2×ipm－2.05	
35 ≤ipm ≤70		Integral to the base product
70 <ipm ≤80	≤0.7×ipm－37.05	
80 < ipm	≤0.75×ipm－41.05	

Table 3 : Standards for time required to switch into sleep, energy consumption of base marking engine at sleep and energy consumption at standby for large format copiers, large format upgradeable digital copiers or large format multifunction devices

Product speed (ipm)	Time required to switch into sleep	Energy consumption of base marking engine at sleep	Energy consumption at standby
ipm ≤30	30 minutes	≤ 8.2W	≤ 0.5W
30 < ipm	60 minutes		

Note:

1. ***Sleep*** denotes the energy saving mode into which the machine will switch after a set time of inactivity without turning off the power.
2. The standard of the power consumption at sleep is calculated, adding the Sleep Mode Power Allowances for Functional Adders listed in Table 4 to the energy consumption of base marking engine at sleep in this table, to judge to meet the standard.
3. Measuring method for energy consumption shall be measured in accordance with "International Energy Star Program Product Requirements, Product Specification for Imaging Equipment, Eligibility Criteria Version 2.0."

Table 4: Sleep mode power allowances for added functionality

Adder Type	Connection Type	Max. Data Rate, *r* (Mbit/ second)	Details	Functional Adder Allowance (watts)
Interface	Wired	r < 20	Includes: USB 1.x, IEEE 488, IEEE 1284/Parallel/ Centronics, RS232	0.2
		20 ≤ r < 500	Includes: USB 2.x, IEEE 1394/ FireWire/i.LINK, 100Mb Ethernet	0.4
		r ≥ 500	Includes: USB 3.x,1G	0.5

			Ethernet	
		Any	Includes: Flash memory-card/smartcard readers, camera interfaces, PictBridge	0.2
	Fax Modem	Any	Applies to Fax Machines and MFDs only.	0.2
	Wireless, Radio-frequency (RF)	Any	Includes: Bluetooth, 802.11	2.0
	Wireless, Infrared (IR)	Any	Includes: IrDA.	0.1
Cordless Handset	N/A	N/A	Capability of the Imaging Equipment to communicate with a cordless handset. Applied only once, regardless of the number of cordless handsets the product is designed to handle. Does not address the power requirements of the cordless handset itself.	0.8
Memory	N/A	N/A	Applies to the internal capacity available in the Imaging Equipment for storing data. Applies to all volumes of internal memory and should be scaled accordingly for RAM. This adder does not apply to hard disk or flash memory.	0.5/GB
Scanner	N/A	N/A	Applies to MFDs and Copiers only.Includes: Cold Cathode Fluorescent Lamp (CCFL) or a technology other than CCFL, such as Light-Emitting Diode (LED), Halogen, Hot-Cathode Fluorescent Tube (HCFT), Xenon, or Tubular Fluorescent (TL) technologies. (Applied only once, regardless of the lamp size or the number of lamps/bulbs	0.5

			employed.)	
Power Supply	N/A	N/A	Applies to both internal and external power supplies of Mailing Machines and Standard Format products using Inkjet and Impact marking technologies with nameplate output power (POUT) greater than 10 watts.	0.02 x (*POUT* – 10.0)
Touch Panel Display	N/A	N/A	Applies to both monochrome and color touch panel displays.	0.2
Internal Disk Drives	N/A	N/A	Includes any high-capacity storage product, including hard-disk and solid-state drives. Does not cover interfaces to external drives.	0.15

Note: Among adder type, the number of allowances claimed for interface functional adders, including any fax capability is 2 or less and the number of allowances of any non-interface functional adders is unlimited.

Table 5-1 : Standards for energy consumption at low power mode, etc. for copiers with consideration for reuse

Copy speed in copies per minute (CPM)	Low power mode(watts)	Time to switch to low power mode	Recovery time from low power mode	Off mode (watts)	Time to switch to off mode	Automatic duplex mode
0 < CPM ≤ 20	N/A	N/A	N/A	≤ 5W	≤ 30 min.	Recommended
20 < CPM ≤ 44	≤ 3.85xCPM+5W	≤ 15 min.	≤ 30 sec.	≤ 15W	≤ 60 min.	Mandatory
44 < CPM	≤ 3.85xCPM+5W	≤ 15 min.	≤ 30 sec. (recommended)	≤ 20W	≤ 90 min.	Mandatory

Note:

1. ***Copy speed*** is measured as CPM, the number of copies produced per minute (The same definition applies for Table 5-2 below.).
   Each duplex output counts as two copies.
   For copiers other than large-format copiers, measure CPM using A4-size paper.
   For large-format copiers, measure CPM with the largest size paper the machine can process, and convert into the number of A4-size paper using the following calculation:
   (1) A2 size: CPM x 4

(2) A1 size: CPM x 8
(3) A0 size: CPM x 16

2. ***Automatic duplex mode*** is the function to simultaneously copy both sides automatically. The same definition applies for Table 5-3 and Table 5-5 below.
3. ***Recommended*** denotes that it is desirable for a copier to have duplex mode function, or can be supplemented with duplex mode function. The same definition applies for Table 5-3 and Table 5-5 below.
4. ***Mandatory*** denotes that it is required for a copier to have duplex mode function, or can be supplemented with duplex mode function. The same definition applies for Table 5-3 and Table 5-5 below.
5. ***Low-power mode.*** This is the low power consumption state that the copier automatically enters after a specified period of inactivity. Same applies for Tables 5-2 to 5-6 below.
6. ***Off mode.*** This is the feature that the copier automatically turns off completely, after a specified period of inactivity. Same applies for Tables 5-2, 5-5 and 5-6 below.
7. Measuring method for energy consumption shall be measured in accordance with "International Energy Star Program Operating Specification (conducted January 1, 2006), Appendix Table 2". Same applies for Tables 5-2 to 5-6 below.
8. If power consumption meets off mode standards at all times during low power mode, an off mode is not necessary. Same applies for Tables 5-2, 5-5 and 5-6 below.

Table 5-2 : Standards for energy consumption at low power mode, etc. in large format copiers, etc. with consideration for reuse

Copy speed in copies per minute (CPM)	Low power mode (watts)	Time to switch to low power mode	Recovery time from low power mode	Off mode (watts)	Time to switch to off mode
0 < CPM ≤ 40	N/A	N/A	N/A	≤ 10W	≤ 30 min.
40 < CPM	≤ 3.85 x CPM + 5W	≤ 15 min	≤ 30 sec. (recommended)	≤ 20W	≤ 90 min.

Table 5-3 : Standards for energy consumption at low power mode, etc. in multifunctional devices with consideration for reuse (includes devices that have color copy function)

Image reproduction speed in images per minute (IPM)	Low power mode (watts)	Recovery time from low power mode	Sleep mode (watts)	Time to switch to sleep mode	Automatic duplex mode
0 < IPM ≤ 10	N/A	N/A	≤ 25W	≤ 15 min.	Recommended
10 < IPM ≤ 20	N/A	N/A	≤ 70W	≤ 30 min.	Recommended
20 < IPM ≤ 44	≤ 3.85 x IPM + 50W	≤ 30 sec.	≤ 80W	≤ 60 min.	Mandatory
44 < IPM ≤ 100	≤ 3.85 x IPM + 50W	≤ 30 sec. (recommended)	≤ 95W	≤ 90 min.	Mandatory

100 < IPM	≤ 3.85 x IPM + 50W	≤ 30 sec. (recommended)	≤ 105W	≤ 120 min.	Mandatory

Note:

1. ***Sleep mode.*** This is the secondary low power state the copier automatically enters after a specified period of inactivity in the low power mode. Same applies for Table 5-4 below.
2. If power consumption meets sleep mode standards at all times during low power mode, a sleep mode is not necessary. Same applies for Table 5-4 below.
3. Time to switch to low power mode shall be set at 15 minutes when shipped. Same applies for Tables 5-4 to 5-6 below.

Table 5-4 : Standards for energy consumption at low power mode, etc. in large format multifunctional device with consideration for reuse

Image reproduction speed in images per minute (IPM)	Low power mode (watts)	Recovery time from low power mode	Sleep mode (watts)	Time to switch to sleep mode
0 < IPM ≤ 40	N/A	N/A	≤ 70W	≤ 30 min.
40 < IPM	≤ 4.85 x IPM + 50W	≤ 30 sec. (recommended)	≤ 105W	≤ 90 min.

Table 5-5 : Standards for energy consumption at low power mode, etc. in upgradeable digital copiers with consideration for reuse

Image reproduction speed in images per minute (IPM)	Low power mode (watts)	Recovery time from low power mode	Off mode (watts)	Time to switch to off mode	Automatic duplex mode
0 < IPM ≤ 10	N/A	N/A	≤ 5W	≤ 15 min.	Recommended
10 < IPM ≤ 20	N/A	N/A	≤ 5W	≤ 30 min.	Recommended
20 < IPM ≤ 44	≤ 3.85 x IPM + 5W	≤ 30 sec.	≤ 15W	≤ 60 min.	Mandatory
44 < IPM ≤ 100	≤ 3.85 x IPM + 5W	≤ 30 sec. (recommended)	≤ 20W	≤ 90 min.	Mandatory
100 < IPM	≤ 3.85 x IPM + 5W	≤ 30 sec. (recommended)	≤ 20W	≤ 120 min.	Mandatory

Table 5-6 : Standards for energy consumption at low power mode, etc. in large format upgradeable digital copiers with consideration for reuse

Image reproduction speed in images per minute (IPM)	Low power mode (watts)	Recovery time from low power mode	Off mode (watts)	Time to switch to off mode
0 < IPM ≤ 40	N/A	N/A	≤ 65W	≤ 30 min.
40 < IPM	≤ 4.85 x IPM + 45W	N/A	≤ 100W	≤ 90 min.

(2)Target Setting Guideline

Ratio of the number of copiers (including multifunctional devices and upgradeable digital copiers) that meets the criteria, to the total number of copiers to be purchased (including lease/rental agreements) in the fiscal year.

5-2. Printers, etc.

(1) Items and Evaluation Criteria

Printers Multifunction Printers	**Evaluation Criteria** (1) Printers and Multifunction Printers (excluding large format devices) meet the standards of applicable category below. a. Monochrome printers (including high performance inkjet and excluding inkjet and impact printers) meet the standards of applicable category in Table 1-1. Monochrome multifunction printers meet the standards of applicable category in Table 1-2. b. Color printers (including high performance inkjet and excluding inkjet and impact printers) shall meet the standards of applicable category in Table 2-1. Color Multifunction color printers meet the standards of applicable category in Table 2-2. c. Inkjet and Impact printers meet the standards of applicable category in Table 3-1. Inkjet multifunction printers meet the standards of applicable category in Table 3-2. (2) Large format inkjet printers and multifunction devices shall meet the standards of applicable category in Table 4-1, other large format inkjet printers meet the standards of applicable category in Table 4-2. (3) The papers which meet the criteria for specified procurement goods are acceptable if the papers belong to the specified procurement items. (4) Amounts of specified chemical substances do not exceed the standard content rate. **Factors for Consideration** (1) Batteries do not include cadmium alloys, lead alloys, or mercury alloys. This is not required, however, if batteries including these substances are collected, reused, or recycled without failure, and/or properly processed. (2) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (3) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (4) Has paper-saver feature. (5) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (6) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Multifunction Printers*** mean products that have one or more function of copier,

scan, or fax in addition to print function.

2. ***Large format devices*** include those designed for A2 size media and larger, including those designed to accommodate continuous-form media at a width of 406 millimeters (mm) or wider.
3. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
4. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.
5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
6. When the printer to be procured includes consumables comprised of a single toner container, and fulfills the Evaluation Criteria (5) of ***Toner Cartridge***, indicated ***5-6 Cartridges, etc.*** in this Basic Policy, "The chemical safety of toner is confirmed," it will be treated as a specified procurement.
7. As for Evaluation Criteria (3), as a precondition, papers are required not to have negative effect on the machine, and are able to be used for the print quality without trouble.

Table 1-1 : Standards for standard energy consumption in monochrome printers(excluding inkjet type, impact type and large format devices)

Product speed (ipm)	Standard (kWh)	Factor of automatic duplex printing function
ipm ≤5	≤0.3	Not applied
5 < ipm ≤20	≤0.04×ipm+0.1	
20 < ipm ≤24	≤0.06×ipm－0.3	
24 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <37	≤0.11×ipm－1.8	
37 ≤ ipm ≤40		Integral to the base product
40 < ipm ≤65	≤0.16×ipm－3.8	
65 < ipm ≤90	≤0.2×ipm－6.4	
90 < ipm	≤0.55×ipm－37.9	

Notes:

1. ***Product speed*** is the maximum, nominal, and one side print speed when the black and white image is generated, and the ipm speed calculated in all cases is rounded off to the nearest integer. 1ipm (number of images for each amount) is equal to single A4 size or 8.5" x 11" sheet printed on one side. If the maximum claimed speeds differ when producing images on A4 size or 8.5" x 11" paper the higher of two shall be used. Same applies for Tables 1-2, 2-1 and 2-2 below.

2. Products for A3-capable (Standard format products with a paper path width equal to or greater than 275 mm.) are a 0.3 kWh/wk allowance standards of the applicable category in the Tables. Same applies for Tables 1-2, 2-1, and 2-2 below.

Table 1-2 : Standards for standard energy consumption in monochrome multifunction printers(excluding inkjet type, impact type and large format devices)

Product speed(ipm)	standard(kWh)	Factor of automatic duplex printing function
ipm ≤5	≤0.4	Not applied
5 < ipm ≤24	≤0.07×ipm+0.05	
24 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <37	≤0.11×ipm－1.15	
37 ≤ ipm ≤50		Integral to the base product
50 < ipm ≤80	≤0.25×ipm－8.15	
80 < ipm	≤0.6×ipm－36.15	

Table 2-1 : Standards for standard energy consumption in color printers(excluding inkjet type, impact type and large format devices)

Product speed(ipm)	Standard(kWh)	Factor of automatic duplex printing function
ipm ≤10	≤1.3	Not applied
10 < ipm ≤15	≤0.06×ipm+0.7	
15 < ipm ≤19	≤0.15×ipm－0.65	
19 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <35	≤0.2×ipm－2.15	
35 ≤ ipm ≤75		Integral to the base product
75 < ipm	≤0.7×ipm－39.65	

Table 2-2 : Standards for standard energy consumption in color multifunction printers (excluding inkjet type, impact type and large format devices)

Product speed(ipm)	standard(kWh)	Factor of automatic duplex printing function
ipm ≤ 10	≤1.5	Not applied
10 < ipm ≦15	≤0.1×ipm+0.5	
15 < ipm ≤19	≤0.13×ipm+0.05	
19 < ipm ≤30		Integral to the base product or optional accessory
30 < ipm <35	≤0.2×ipm－2.05	

35 ≤ ipm ≤70		Integral to the base product
70 < ipm ≤80	≤0.7×ipm－37.05	
80 < ipm	≤0.75×ipm－41.05	

Table 3-1 : Standards for default time to sleep and energy consumption of base marking engine at sleep mode and energy consumption at standby in inkjet and impact printers(excluding large format devices)

Product speed (ipm)	Default time to sleep	Sleep mode energy consumption of base marking engine	Energy consumption at standby
ipm ≤10	5 minutes	≤ 0.6W	≤ 0.5W
10 < ipm ≤20	15 minutes		
20 < ipm ≤30	30 minutes		
30 < ipm	60 minutes		

Note:

1. ***Sleep*** denotes the energy saving mode into which the machine will switch after a set time of inactivity without turning off the power. Same applies for Tables 3-2, 4-1 and 4-2 below.
2. The standard of sleep mode energy consumption is calculated, adding the sleep mode power allowances for functional adders listed in Table 5 to the sleep mode energy consumption of base marking engine in this table, to judge to meet the standard. Same applies for Tables 3-2, 4-1 and 4-2 below.
3. Measuring method for standard energy consumption shall be measured in accordance with "International ENERGY STAR Program Requirements, Product Specification for Imaging Equipment, Eligibility Criteria Version 2.0." Same applies for Tables 3-2, 4-1 and 4-2 below.

Table 3-2 : Standards for default time to sleep and energy consumption of base marking engine at sleep mode and energy consumption at standby in inkjet multifunction printers(excluding large format devices)

Product speed (ipm)	Default time to sleep	Energy consumption of base marking engine at sleep	Energy consumption at standby
ipm ≤ 10	15 minutes	≤ 0.6W	≤ 0.5W
10 < ipm ≤20	30 minutes		
20< ipm	60 minutes		

Table 4-1 : Standards for default time to sleep and energy consumption of base marking engine at sleep mode and energy consumption at standby in inkjet large format printers and inkjet large format multifunction printers

Product speed (ipm)	Default time to sleep	Energy consumption of base marking	Energy consumption at standby

		engine at sleep	
ipm ≤ 30	30 minutes	≤ 4.9W	≤ 0.5W
30 < ipm	60 minutes		

Table 4-2 : Standards for default time to sleep and energy consumption of base marking engine at sleep and energy consumption at standby for large format printers other than inkjet type

Product speed (ipm)	Default time to sleep	Energy consumption of base marking engine at sleep	Energy consumption at standby
ipm ≤ 30	30 minutes	≤ 2.5W	≤ 0.5W
30 < ipm	60 minutes		

Table 5 : Sleep Mode Power Allowances for Added Functionality

Adder Type	Connection Type	Max. Data Rate, *r* (Mbit/ second)	Details	Functional Adder Allowance (watts)
Interface	Wired	r < 20	Includes: USB 1.x, IEEE 488, IEEE 1284/Parallel/ Centronics, RS232	0.2
		20 ≤ r < 500	Includes: USB 2.x, IEEE 1394/ FireWire/i.LINK, 100Mb Ethernet	0.4
		r ≥ 500	Includes: USB 3.x,1G Ethernet	0.5
		Any	Includes: Flash memory-card/smartcard readers, camera interfaces, PictBridge	0.2
	Fax Modem	Any	Applies to Fax Machines and MFDs only.	0.2
	Wireless, Radio-frequ ency (RF)	Any	Includes: Bluetooth, 802.11	2.0
	Wireless, Infrared (IR)	Any	Includes: IrDA.	0.1
Cordless Handset	N/A	N/A	Capability of the Imaging Equipment to communicate with a cordless handset. Applied only once, regardless of the number of cordless handsets the product is designed to handle. Does not address the power requirements of the cordless handset itself.	0.8

Memory	N/A	N/A	Applies to the internal capacity available in the Imaging Equipment for storing data. Applies to all volumes of internal memory and should be scaled accordingly for RAM. This adder does not apply to hard disk or flash memory.	0.5/GB
Scanner	N/A	N/A	Applies to MFDs and Copiers only.Includes: Cold Cathode Fluorescent Lamp (CCFL) or a technology other than CCFL, such as Light-Emitting Diode (LED), Halogen, Hot-Cathode Fluorescent Tube (HCFT), Xenon, or Tubular Fluorescent (TL) technologies. (Applied only once, regardless of the lamp size or the number of lamps/bulbs employed.)	0.5
Power Supply	N/A	N/A	Applies to both internal and external power supplies of Mailing Machines and Standard Format products using Inkjet and Impact marking technologies with nameplate output power (POUT) greater than 10 watts.	0.02 x (*POUT* – 10.0)
Touch Panel Display	N/A	N/A	Applies to both monochrome and color touch panel displays.	0.2
Internal Disk Drives	N/A	N/A	Includes any high-capacity storage product, including hard-disk and solid-state drives. Does not cover interfaces to external drives.	0.15

Note: Among adder type, the number of allowances claimed for interface functional adders, including any fax capability is 2 or less and the number of allowances of any non-interface functional adders is unlimited.

(2) Target Setting Guideline

Ratio of the number of printers and multifunction printers meeting the criteria to the total number of printer/faxes to be purchased (including lease/rental agreements) in the fiscal year.

5-3. Fax Machines

(1) Items and Evaluation Criteria

Fax machines	**Evaluation Criteria** (1) Monochrome fax machines (excluding inkjet types) meet the standards of appropriate category listed in Table 1. (2) Color fax machines (excluding inkjet types) meet the standards of appropriate category listed in Table 2. (3) Inkjet type fax machines meet the standards listed in Table 3. (4) Contents of specified chemical substances do not exceed the standard content rate. **Factors for Consideration** (1) Batteries do not include cadmium alloys, zinc alloys, or mercury alloys. This is not required, however, if batteries including these substances are collected, reused, or recycled without failure, and/or properly processed. (2) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment and reuse. (3) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
2. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.
3. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table 1 : Standards for standard energy consumption for monochrome fax machines (excluding inkjet type machine)

Product speed(ipm)	Standard(kWh)
ipm ≤5	≤0.3
5 < ipm ≤20	≤ 0.04× ipm+0.1
20 < ipm ≤30	≤ 0.06× ipm－0.3
30 < ipm ≤40	≤ 0.11× ipm－1.8
40 < ipm ≤65	≤ 0.16× ipm－3.8
65 < ipm ≤90	≤ 0.2× ipm－6.4
90 < ipm	≤ 0.55× ipm－37.9

Note:

1. ***Product speed*** is the maximum, nominal, and one side print speed when the black and white image is generated, and the ipm speed calculated in all cases is rounded off to the nearest integer. 1ipm (number of images for each amount) is equal to single A4 size or 8.5" x 11" sheet printed on one side. If the maximum claimed speeds differ when producing images on A4 size or 8.5" x 11" paper the higher of two shall be used. Same applies for Table 2 below.
2. Products for A3-capable (Standard format products with a paper path width equal to or greater than 275 mm) are a 0.3 kWh/wk allowance standards of the applicable category in the Tables. Same applies for Table 2 below.
3. Measuring method for standard energy consumption shall be measured in accordance with "International ENERGY STAR Program Requirements, Product Specification for Imaging Equipment, Eligibility Criteria Version 2.0." Same applies for Tables 2 and 3 below.

Table 2 : Standards for standard energy consumption for color fax machines (excluding inkjet type machines)

Product speed (ipm)	Standard(kWh)
ipm ≤10	≤1.3
10 < ipm ≤15	≤0.06×ipm+0.7
15 < ipm ≤30	≤0.15×ipm－0.65
30 < ipm ≤75	≤0.2×ipm－2.15
75 < ipm	≤0.7×ipm－39.65

Table 3 : Standards for default time to sleep, energy consumption of base marking engine at Sleep mode and energy consumption at standby for inkjet fax machines

Default time to sleep	Energy consumption of base marking engine at sleep mode	Energy consumption at standby
5 minutes	≤ 0.6W	≤ 0.5W

Note:

1. ***Sleep*** denotes the energy saving mode into which the machine will switch after a set time of inactivity without turning off the power.
2. The standard of the power consumption at sleep mode is calculated, adding the

sleep mode power allowances for functional adders listed in Table 4 to the energy consumption of base marking engine at sleep mode in this table, to judge to meet the standard.

Table 4 : Sleep Mode Power Allowances for Functional Adders

Adder Type	Connection Type	Max. Data Rate, *r* (Mbit/ second)	Details	Functional Adder Allowance (watts)
Interface	Wired	$r < 20$	Includes: USB 1.x, IEEE 488, IEEE 1284/Parallel/ Centronics, RS232	0.2
		$20 \leq r < 500$	Includes: USB 2.x, IEEE 1394/ FireWire/i.LINK, 100Mb Ethernet	0.4
		$r \geq 500$	Includes: USB 3.x,1G Ethernet	0.5
		Any	Includes: Flash memory-card/smartcard readers, camera interfaces, PictBridge	0.2
	Fax Modem	Any	Applies to Fax Machines and MFDs only.	0.2
	Wireless, Radio-frequ ency (RF)	Any	Includes: Bluetooth, 802.11	2.0
	Wireless, Infrared (IR)	Any	Includes: IrDA.	0.1
Cordless Handset	N/A	N/A	Capability of the Imaging Equipment to communicate with a cordless handset. Applied only once, regardless of the number of cordless handsets the product is designed to handle. Does not address the power requirements of the cordless handset itself.	0.8
Memory	N/A	N/A	Applies to the internal capacity available in the Imaging Equipment for storing data. Applies to all volumes of internal memory and should be scaled accordingly for RAM. This adder does not apply to hard disk or flash memory.	0.5/GB
Scanner	N/A	N/A	Applies to MFDs and Copiers only.Includes: Cold Cathode	0.5

			Fluorescent Lamp (CCFL) or a technology other than CCFL, such as Light-Emitting Diode (LED), Halogen, Hot-Cathode Fluorescent Tube (HCFT), Xenon, or Tubular Fluorescent (TL) technologies. (Applied only once, regardless of the lamp size or the number of lamps/bulbs employed.)	
Power Supply	N/A	N/A	Applies to both internal and external power supplies of Mailing Machines and Standard Format products using Inkjet and Impact marking technologies with nameplate output power (POUT) greater than 10 watts.	0.02 x (*POUT* – 10.0)
Touch Panel Display	N/A	N/A	Applies to both monochrome and color touch panel displays.	0.2
Internal Disk Drives	N/A	N/A	Includes any high-capacity storage product, including hard-disk and solid-state drives. Does not cover interfaces to external drives.	0.15

Note: Among adder type, the number of allowances claimed for interface functional adders, including any fax capability is 2 or less and the number of allowances of any non-interface functional adders is unlimited.

(2) Target Setting Guideline

Ratio of the number of fax machines meeting the criteria to the total number of fax machines to be purchased (including lease/rental agreements) in the fiscal year.

5-4. Scanners

(1) Items and Evaluation Criteria

Scanners	**Evaluation Criteria** (1) Meet the standard of applicable category in Table 1. (2) Contents of specified chemical substances do not exceed the standard content rate. **Factors for Consideration** (1) A system for collection and reuse/recycling of used machines, and a system for the proper disposal of components which cannot be reused or recycled is considered. (2) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (3) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
2. ***The standard content rate of specified chemical substances*** denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.
3. Recycled plastic denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table 1: Standards for default time to sleep, energy consumption of base marking engine at sleep mode and energy consumption at standby for scanners

Default time to sleep	Energy consumption of base marking engine at sleep mode	Energy consumption at standby
≤ 15 minutes	≤2.5W	≤ 0.5W

Note:

1. ***Sleep*** denotes the energy saving mode into which the machine will switch after a set time of inactivity without turning off the power.

2. The standard of the power consumption of base marking engine at sleep mode is calculated, adding the sleep mode power allowances for functional adders listed in Table 2 to the energy consumption of base marking engine at sleep mode in this table, to judge to meet the standard.
3. Measuring method for standard energy consumption shall be measured in accordance with "International ENERGY STAR Program Requirements, Product Specification for Imaging Equipment, Eligibility Criteria Version 2.0."

Table 2 : Sleep mode power allowances for functional adders

Adder Type	Connection Type	Max. Data Rate, *r* (Mbit/ second)	Details	Functional Adder Allowance (watts)
Interface	Wired	$r < 20$	Includes: USB 1.x, IEEE 488, IEEE 1284/Parallel/ Centronics, RS232	0.2
		$20 \leq r < 500$	Includes: USB 2.x, IEEE 1394/ FireWire/i.LINK, 100Mb Ethernet	0.4
		$r \geq 500$	Includes: USB 3.x,1G Ethernet	0.5
		Any	Includes: Flash memory-card/smartcard readers, camera interfaces, PictBridge	0.2
	Fax Modem	Any	Applies to Fax Machines and MFDs only.	0.2
	Wireless, Radio-frequ ency (RF)	Any	Includes: Bluetooth, 802.11	2.0
	Wireless, Infrared (IR)	Any	Includes: IrDA.	0.1
Cordless Handset	N/A	N/A	Capability of the Imaging Equipment to communicate with a cordless handset. Applied only once, regardless of the number of cordless handsets the product is designed to handle. Does not address the power requirements of the cordless handset itself.	0.8
Memory	N/A	N/A	Applies to the internal capacity available in the Imaging Equipment for storing data. Applies to all volumes of internal memory and should be scaled accordingly for RAM.	0.5/GB

			This adder does not apply to hard disk or flash memory.	
Scanner	N/A	N/A	Applies to MFDs and Copiers only. Includes: Cold Cathode Fluorescent Lamp (CCFL) or a technology other than CCFL, such as Light-Emitting Diode (LED), Halogen, Hot-Cathode Fluorescent Tube (HCFT), Xenon, or Tubular Fluorescent (TL) technologies. (Applied only once, regardless of the lamp size or the number of lamps/bulbs employed.)	0.5
Power Supply	N/A	N/A	Applies to both internal and external power supplies of Mailing Machines and Standard Format products using Inkjet and Impact marking technologies with nameplate output power (POUT) greater than 10 watts.	0.02 x (*POUT* – 10.0)
Touch Panel Display	N/A	N/A	Applies to both monochrome and color touch panel displays.	0.2
Internal Disk Drives	N/A	N/A	Includes any high-capacity storage product, including hard-disk and solid-state drives. Does not cover interfaces to external drives.	0.15

Note: Among adder type, the number of allowances claimed for interface functional adders, including any fax capability is 2 or less and the number of allowances of any non-interface functional adders is unlimited.

(2) Target Setting Guideline

Ratio of the number of scanners meeting the criteria to the total number of scanners to be purchased (including lease/rental agreements) in the fiscal year.

5-5. Projectors

(1) Items and Evaluation Criteria

Projectors	**Evaluation Criteria** (1) The weight of product main body shall not exceed the number obtained by the formula of applicable category in Table 1. (2) The power consumption shall not exceed the number obtained by the formula of applicable category in Table 2. (3) Standby power consumption shall be 0.5W or less. However, this is not applicable on the network latency. (4) If a mercury lamp is used as a light source, must fulfill the following: a. Make it known to users that mercury is used and provide the information about appropriate disposal method. b. A system is in place for the collection of used lamps or products. (5) Supply of the service parts and spare parts shall be continued for 5 years or more after the termination of product manufacturing. (6) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) Time for lamp replacement is 3,000 hours or more. (2) The noise is as low as possible. (3) A system for collection and reuse/recycling of used products, and a system for the proper disposal of components which cannot be reused or recycled is considered. (4) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (5) The use of halogenenate noncombustibles on the casing is as minimized as possible. (6) If plastic components are used for either the body or the parts, the item uses as large amount of recycled plastic as possible, (7) Manuals or accessories provided with the product are eliminated as much as possible. (8) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (9) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Projectors*** under consideration in this section refers to those having the computer input terminal and possible to project the images on such as computers and front projection whose effective flux is under 5,000 lm used in meeting rooms or class rooms, including projectors capable to project on the screen with 60 inches (1.2 m ×

0.9m) or more in width within a distance of 1 meter (referred to as ***Short focus projector*** hereinafter, especially, the one within a distance of 0.5m referred to as ***Super short focus projector***).

2. ***Standby power consumption*** refers to minimum power consumption at which a product may be connected to a main power source and maintained for an indefinite period of time. Standby is a product minimum power consumption mode.
3. Evaluation Criteria (3) does not applies for the products having AC interception device and the portable one for mobile use mainly.
4. ***Provide the information*** in Evaluation Criteria (4) a. denotes that specific information for use of mercury and appropriate disposal method of a used lamp must be provided to the user, by indicating on package of the lamp or the product main body, enclosed printed material, user's manual and websites.
5. ***A system is in place for the collection*** in Evaluation Criteria (4) b. denotes the fulfillment of the below requirements.
   a. The manufacturer or the seller has a system (a collection system located at the store, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used lamp and the product main body.
   b. In order to precipitate appropriate collection, the product name and business name (manufacturer brand name is permissible) are marked on the lamp and product main body for easy acknowledgement at the time of disposal.
   c. Specific information for the collection (collection method, collection location, etc.), must be provided to the user by either package of the lamp and product main body, printed matter, manual or websites concerning used lamp and used product.
6. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
7. ***The standard content rate of specified chemical substances*** denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
8. ***Time for lamp replacement*** denotes average hours of lamp operating till the effective flux when a product is used falls below 50% of the nominal effective flux and standard hours to lead a proper lamp replacement.
9. ***Recycled Plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.).
10. Each procurement organization is to take the following into careful account:
    a. When procuring, consider the objective of use and business type in order to determine the necessary type and function.
    b. Consider the type of contract that would enable the minimum amount necessary for manuals and accessories.
    c. Confirm and consider the factors for consideration

specified in the user's manual when procuring the merchandise, when using and disposing.

d. If a system for the collection of used lamps or products is in pace, proper disposals of them should be done by utilizing the system.

Table 1: The Standard of the Weight of Product Main Body

Effective Flux: ϕ (lm)	Number of lamps as a light source	Calculation formula of standard of weight (kg)
ϕ <2,500	-	4.0×α
2,500≤ ϕ <4,000	-	5.0×α
4,000≤ ϕ <5,000	One	0.003× ϕ × α
	Two or more	0.003× ϕ × α×1.1

Note:

1. "***α*** " is a factor, and is assumed 1.2 for short focus projector, 1.0 for others.
2. For the super short focus projector whose effective flux is under 4,000lm, the standard of weight is 7.5kg, regardless of the calculation formula of standard of weight.

Table2: The Standard of the Power Consumption

Effective Flux: φ(lm)	Calculation formula of standard of power consumption(W)
ϕ <2,500	0.085 × ϕ ×α×β×γ+80
2,500≤ ϕ <5,000	0.077 × ϕ ×α×β×γ+80

Note:

α, β, γ is a factor denotes the following:

α: Projectors having the resolution of WXGA (1,280 × 768 dots) or higher : 1.1, others:1.0.

β: Short focus projectors or super short focus projectors: 1/cos θ, others: 1.0. However, θ is injection angle of a horizontal line passing through the center of a projector lens (mirror) and the center of a project screen. β shall be up to 1.3.

γ: Products using 2 or more lamps as a light source :1.5, others:1.0

(2) Target Setting Guideline

Ratio of the number of products meeting the criteria to the total number of projectors to be purchased (including lease or rental) in the fiscal year.

5-6 Cartridges, etc.

(1) Items and Evaluation Criteria

Toner cartridges	**Evaluation Criteria** (1) A system is put in place for the recovery and material recycling of used toner cartridges. (2) Parts of used and recovered toner cartridges that are reused or have undergone material recycling comprises 50% or more by total weight of the collected used item (excluding toner). (3) Parts of used and recovered toner cartridges whose resources are recycled comprises 95% or more by total weight of the collected used item (excluding toner). (4) Parts of used toner cartridges that have been collected cannot be reused or recycled must do reduction of volume, etc. appropriate treatment and prevention of direct landfill disposal. (5) Chemical safety of toner is confirmed. (6) Photosensitive component does not include as prescribed component cadmium, lead, mercury, selenium, or their compounds. (7) When the paper used meets the criteria for specified procurement, product must be capable of using the specified procurement material. **Factors for Consideration** (1) A system is put in place for using plastics from collected toner cartridges as a material or parts of the new ones. (2)Providing with certificate, etc. that show the evaluation criteria is filled about construction of various systems and recycling rate, etc. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Ink cartridges	**Evaluation Criteria** (1) A system is put in place for the recovery of the used ink cartridges. (2) Parts of used and recovered ink cartridges that are reused or have undergone material recycling comprises 25% or more by total weight of the collected used item (excluding ink). (3) Parts of used and recovered ink cartridges whose resources are recycled comprises 95% or more by total weight of the collected used item (excluding ink). (4) Parts of used toner cartridges that have been collected cannot be reused or recycled must do reduction of volume etc, and prevention of direct landfill disposal. Parts of used toner cartridges that have been collected cannot be reused or recycled must do reduction of volume etc, appropriate treatment and

	prevention of direct landfill disposal. (5) Chemical safety of ink is confirmed. (6) When the paper used meets the criteria for specified procurement, product must be capable of using the specified procurement material. **Factors for Consideration** (1) Providing with certificate, etc. that show the evaluation criteria is filled about construction of various systems and recycling rate, etc. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Toner cartridges*** or ***Ink cartridges*** (hereinafter referred to as cartridges, etc.) under consideration refers to products newly purchased to supply copiers, printers, etc., and does not include those that accompany those machines at the time of purchase.
2. ***Toner cartridges*** refers to ***new toner cartridges*** or ***recycled toner cartridges***, and are cartridges for the purpose of printing using a method that utilizes two of the following: copiers that use electronic photocopying; toner containers supplied with toner that are used for printers, faxes, etc.; and exposure or development unit. For cartridges comprised of exposure or development units, only those that are sold as a unit with toner container will be considered. Products that are comprised only of toner container, exposure unit, or development unit will not be considered.
    a. ***New toner cartridges*** refers to toner cartridges manufactured by the manufacturer of the main machine unit, or consigned to an outside source.
    b. ***Recycled toner cartridges*** refers to toner cartridges that are created by supplying a used toner cartridge with toner, and replacing necessary consumables. The fact that it is a recycled toner cartridge is noted on either the packaging, printed material included in the packaging, or instruction material.
3. ***Ink cartridges*** refers to ***new ink cartridges*** or ***recycled ink cartridges***, and are cartridges for the purpose of printing with an ink-tank filled with ink, or ink-tank with a printing head, that are used in copiers, printers, fax machines, etc. that utilize inkjet method.
    a. ***New ink cartridges*** refers to ink cartridges manufactured by the manufacturer of the main machine unit, or consigned to an outside source.
    b. ***Recycled ink cartridges*** refers to ink cartridges that are created by supplying a used ink cartridge with ink, and replacing necessary consumables. The fact that it is a recycled ink cartridge is noted on either the packaging, printed material included in the packaging, or instruction material.
4. ***Material recycling*** refers to recycling of the material. It does not include energy

recovery, petrochemicals, gasification, high-furnace reduction, coke furnace chemical recycling process.

5. ***Reuse/Material recycling ratio*** refers to the ratio by weight of parts that are either reused or have undergone the process of material recycling, to the total weight of collected cartridges, etc. that has been disposed of after use. However, the cartridges, etc. made public in the Web site or the catalog, etc. are excluded from the object of ***Collected cartridges, etc.*** as a collection off the subject.
6. ***Recycled ratio*** refers to the ratio by weight of parts that have gone through the process of recycling, material recycling, energy recovery, conversion into petrochemicals, gasification, high-furnace reduction, or coke furnace chemical recycling process, to the total weight of cartridges, etc. that have been disposed of after use. However, the cartridges, etc. made public in the Web site or the catalog, etc. are excluded from the object of ***Collected cartridges, etc.*** as a collection off the subject.
7. ***A system is put in place for recovery*** noted in criteria (1) in toner cartridges and ink cartridges indicates that the following criteria are met:
    a. A method (recycling by the merchant, recycling using a reverse marketing recycling system that responds to the demands of the user, etc.) is considered where either the manufacturer or the retailer have voluntarily collected used cartridges etc. (collection is undertaken either by themselves, or by an entity commissioned to do the task. Multiple entities may work together in the collection.)
    b. The name of the product and manufacturer (brand name may be accepted) is clearly labeled on the main part of the cartridge.
    c. The user may obtain, from either the product packaging, printed matter included in the packaging, user instructions for the main device, or on the website, specific information pertaining to the recycling of used cartridges (method of and location for recycling).
8. ***Appropriate treatment*** noted in criteria (4) for toner cartridges and criteria (4) for ink cartridges indicates that the company involved in the recovery of used cartridges takes responsibility for adequately disposing those parts that cannot be reused or recycled. This does not include those instances in which a recovery system by another company is used (excluding those instances where recovery is undertaken based on a contract or agreement made between companies). However, the cartridges, etc. made public in the Web site or the catalog, etc. are excluded from the object of ***Collected cartridges, etc.*** as a collection off the subject.
9. ***Chemical safety*** of toner and ink will be based on the following:
    a. Material listed in (i)~(iv) is not intentionally included in toner and ink.
        i. Cadmium, lead, mercury, chromium (VI) compound, nickel, and their compounds. Coordination compounds of nickel with large molecular weight used for purposes such as coloring are not included.
        ii. Material that have been required to indicate the following R numbers based on EC Council Meeting Order 67/548/EEC Appendix I on laws, regulations and

administrative policy on the classification, packaging and labeling of harmful objects designated by the EU:

- R40 (has limited evidence of being carcinogenic
- R45 (may cause cancer)
- R46 (has the potential of causing inheritable damage)
- R49 (may cause cancer if inhaled)
- R60 (may cause damage to reproductive capability)
- R61 (may cause damage to fetus)
- R62 (may, in some cases, cause damage to reproductive capability)
- R63 (may, in some cases, cause damage to fetus)
- R68 (has the potential of causing irreversible damage)

iii. Material creates the need to place a danger label on the product as a whole based on EC Council Meeting Order 67/548/EEC Appendix II and 1999/45/EC.

iv. Azo colorants (dyes and pigments) that have the ability to discharge cancerous aromatic amines, listed in Table 1 which is based on EC Council Meeting Order 2002/61/EC.

b. Toner and ink has yielded a negative result to the Ames test.

c. SDS (Safety Data Sheet) is provided for toner and ink.

Table 1 : Amine that should not be Produced through the Decomposition of the Azo Group

	Chemical substance	CAS No.
1	4-Aminobiphenyl	92-67-1
2	Benzidine	92-87-5
3	4-Chloro-0-toluidine	95-69-2
4	2-naphthylamine	91-59-8
5	0-aminoazotoluene	97-56-3
6	2-Amino-4-nitrotoluene	99-55-8
7	p-Chloroaniline	106-47-8
8	2,4-diaminoanisole	615-05-4
9	4,4’-diaminodiphenylmethane	101-77-9
10	3,3’-dichlorobenzidine	91-94-1
11	3,3'-dimethoxybenzidine	119-90-4
12	3,3'-dimethylbenzidine	119-93-7
13	3,3’-dimethyl-4,4’-diaminodiphenylmethane	838-88-0
14	p-Cresidine	120-71-8
15	4,4’-methylene-bis- (2-chloroaniline)	101-14-4
16	4,4’-oxydianiline	101-80-4
17	4,4'-Thiodianiline	139-65-1
18	0-toluidine	95-53-4
19	2,4-Toluylenediamine	95-80-7

20	2,4,5-trimethylaniline	137-17-7
21	0-anisidine	90-04-0
22	4-aminoazobenzenene	60-09-3

10. When purchasing cartridges, etc., each procurement group is to take into account the impact on the main machine as well as printing quality, and carefully consider the following:
    a. Quality of cartridges, etc. is guaranteed.
        1.Quality if sufficiently controlled through in-house regulations, and quality is guaranteed (replacement or repair in case of inadequate quality resulting from the product used) against bad quality including low-quality printing, paper jam, leak of toner/ink, clogged nozzle, and damage of the main machine (handling of defective cases resulting from the use of cartridges, etc. that is not covered by the insurance of the main machine would not be free of cost even if it is handled within the period during which the guarantee of the main machine is effective).
        2. In cases of damage etc., to the main component of the photo copier or printer due to the use of products that satisfy the requirements listed in this category, it is encouraged that the information of the product (product name, manufacturer, brand name, name of the main machine, etc.) and the resulting problem is recorded.
    b. Ink cartridges should be selected with consideration for its objective and use.
        1.In cases where a high-quality print-out, including photo-quality print-outs, or long-term preservation is necessary, or when use at a place subject to direct sunlight is expected, select an ink cartridge that excels at resistance to light, ozone, and water, and is at the same time coordinated with the main machine.
        2. Select an ink cartridge with consideration for the possibility that ink from a new ink cartridge and ink that was used to refill a recycled ink cartridge may not produce the same color.
11. Each procurement group must carefully consider that the business should be providing with the following document from the viewpoint of securing reliability concerning the chemical safety of the product and business's collecting system, recycling system, and appropriate treatment systems, etc. when the cartridge etc. are procured (For instance, it is possible to confirm it on the Website, etc. opened to the public in the business's judgment).
    a. Ames test report etc. for toner and ink.
    b. SDS (Safety Data Sheet) for toner and ink.
    c. Certificate, etc. that show the evaluation criteria is filled about construction of various systems and recycling rate, etc. shown in Factors for Consideration.

(2) Target Setting Guideline

Ratio of the number of toner cartridges and ink cartridges meeting the criteria to the total number of toner cartridges and ink cartridges to be purchased in the fiscal year.

6. Computers, etc

6-1. Computers

(1) Items and Evaluation Criteria

Computers	**Evaluation Criteria** (1) Server-type computers shall meet the standards of applicable category below. a. Performance rate of energy standard shall exceed 180 obtained by the rate of standard energy consumption efficiency listed in Table 1 for each category. However, for dedicated CISC of CPU type, energy consumption efficiency shall not exceed the standard energy consumption efficiency listed in Table 1 for each category. b. Off mode energy consumption shall be 1.0W or less, and long idle mode energy consumption shall not over maximum power consumption on idle mode obtained by calculation formula in Note 6. (2) Client-type computers shall meet one of the following a, b, c, or d. a. Performance rate of energy standard shall exceed 200 obtained by the rate of standard energy consumption efficiency listed in Table 2 for each category. b. For Desktop Computers, Integrated Desktop Computers, Notebook Computers, Typical Energy Consumption obtained by calculation formula in Note 7 a. shall not exceed Maximum Typical Energy Consumption obtained by calculation formula in Note 7 b. c. For Work Station, weighted power consumption obtained by calculation formula in Note 8 a. shall not exceed maximum power consumption obtained by calculation formula in Note 8 b. d. For Thin Client, Typical Energy Consumption obtained by calculation formula in Note 7 a. shall not exceed Maximum Typical Energy Consumption obtained by calculation formula in Note 9. (3) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. (4) Equipment and function are simplified for notebook computers used for ordinary administrative tasks. **Factors for Consideration** (1) Design consideration takes into account product life, efficient use of material, reuse of parts, or recycling of raw material, in compliance with evaluation criteria for Standards for the Promotion of Efficient Use of Material.

	(2) The operation time of secondary power (battery) is not longer than necessary for notebook computers used for ordinary administrative tasks. (3) The product makes the maximum use of recycled material taken from a previously used product. (4) If plastic components are used for either the body or the parts, the item uses as large amount of recycled plastic as possible, or uses vegetable based plastics whose reductive effect of environmental load has been confirmed. (5) If magnesium alloy is used for either the body or the parts, the item uses as large amount of recycled magnesium alloy as possible. (6) Accessories including manuals, recovery CD's etc. is eliminated as much as possible. (7) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (8) A system for collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Product that meets one of the following criteria is not to be included in ***Computers*** under consideration in this section.
   (1) Complex theory performance exceeds 200,000 mega operations per one second in Server-type Computers.
   (2) The product is capable of utilizing operation processing device that is comprised of over 256 processors.
   (3) The number of input-output signal transmitter channels (only in the case of products whose maximum data transmission speed exceeds 100 megabits per a second) exceeds 512.
   (4) Operation processing device, main memory device, input-output control device, and power device all take a multiple structure.
   (5) Complex theory performance is less than 100 mega operations per one second.
   (6) Product primarily uses its internal battery and without receiving power from a power source, and does not built in a magnetic disk device.
2. ***Server-type Computers*** denote computers designed to provide service and the like via a network.
3. ***Client-type Computers*** denote computers other than server-type computers.
4. Measuring method for performance rate of energy standard is as follows. Round down to eliminate decimals.

   Performance rate of energy standard=$E_M/\times 100$

   E : Energy consumption efficiency(unit:/Giga operation)

   E_M : Standard energy consumption efficiency(unit:/Giga operation)

5 Product types and modes which applied in Evaluation Criteria (1) b, (2) b, c, d, and Note 6 to 9 are as follows:

   a. Product Types

i. Desktop Computer: A computer whose main unit is designed to be located in a permanent location, often on a desk or on the floor, and are not designed for portability and are designed for use with an external display, keyboard, and mouse.
ii. Integrated Desktop Computer: A Desktop Computer in which the computing hardware and display are integrated into a single housing, and which is connected to ac mains power through a single cable.
iii. Notebook Computer: A computer designed specifically for portability and to be operated for extended periods of time both with and without a direct connection to an AC mains power source. Notebook computer include an Integrated Display, a non-detachable, mechanical keyboard (using physical, moveable keys), and pointing device.
iv. Work station: A high-performance, single-user computer typically used for graphics, CAD, software development, financial and scientific applications among other compute intensive tasks.
v. Thin Client: An independently-powered computer that relies on a connection to remote computing resources to obtain primary functionality designed for use in a permanent location such as on a desk and not for portability (Limited to devices with no rotational storage media integral to the compute.). Thin Clients covered by this specification. And include integrated thin client computer in which computing hardware and display are connected to ac mains power through a single cable. Computers which meet the definition of both thin client and notebook computer designed for portability treated as notebook in this section.

b. Operational Modes
i. Off Mode: The lowest power mode which cannot be switched off (influenced) by the user and that may persist for an indefinite time when the appliance is connected to the main electricity supply and used in accordance with the manufacturer's instructions.
ii. Sleep Mode: A low power mode that the computer enters automatically after a period of inactivity or by manual selection.
iii. Idle State: The power state in which the operating system and other software have completed loading, a user profile has been created, activity is limited to those basic applications that the system starts by default, and the computer is not in Sleep Mode. Idle State is composed of two sub-states: Short Idle and Long Idle.
iv. Long Idle: The mode where the Computer has reached an Idle condition and the main computer display has entered a low-power state where screen contents cannot be observed.
v. Short Idle: The mode where the Computer has reached an Idle condition, the screen is on, and Long Idle power management features have not engaged.

Measuring method for energy consumption on each operational mode shall be measured in accordance with "International Energy Star Program Operating Specification (conducted in July, 2014), Appendix Table 2-1".

6. As for Off Mode energy consumption of Evaluation Criteria(1)b, 0.4W adder allowance will be applied, when function to return computer from Sleep Mode or Off

Mode according to demand from network via Ethernet (hereinafter Wake-on-LAN (WOL)) enabled by default upon shipment, 1.4W is the standard for agreement judgement.

Measuring method of maximum power consumption on idle mode is as follows.

Maximum power consumption on idle mode(W)=24.0+(N-1)*8.0+P_{EEE}

N : HDD(Hard disk drive)or number of mounted SSD solid state drive

P_{EEE} : EEE allowance of 0.2W per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet port.

7. Measuring method of Typical Energy Consumption for Desktop computer, Integrated desktop computer, Notebook computer and Thin client and measuring method of Maximum Typical Energy Consumption for Desktop computer, Integrated desktop computer and Notebook computer are as follows.

a. Typical Energy Consumption

$E=(8,760/1,000)\times(P_{OFF}\times T_{OFF}+P_{SL}\times T_{SL}+P_{LI}\times T_{LI}+P_{SI}\times T_{SI)}$

E : Typical Energy Consumption(unit:kWh/year)

P_{OFF} : Measured power consumption in Off Mode (unit:W)

P_{SL} : Measured power consumption in Sleep Mode (unit:W)

P_{LI} : Measured power consumption in Long Idle Mode (unit:W)

P_{SI} : Measured power consumption in Short Idle Mode (unit:W)

T_X : Percentage of hour per year specified in Table 3-1 and 3-2(unit:%)

Desktop computer, Integrated desktop computer and Notebook computer shall be capable of Sleep Mode on instead alternative low power modes with power less than or equal to 10 watts and Thin client without sleep mode on discrete system shall be used measured power consumption in Long Idle Mode (P_{LI}) instead of measured power consumption in Short Idle ($P_{SI)}$ Mode in the above calculating formula.

b. Maximum Typical Energy Consumption

$E_{MAX}=(1+A)*(TEC_{BASE}+TEC_{MEM}+TEC_{GR}+TEC_{ST}+TEC_{DIS}+TEC_{SW}+TEC_{EEE})$

E_{MAX}: Maximum Typical Energy Consumption (unit:kWh/year)

A : Adder allowance given to the power-supply unit that fills efficiency specified in Table 3-3.

TEC_{BASE} : Base Allowance in Table 3-4 (unit:kWh)

TEC_{MEM} : Adder allowance of memory equipped with system specified in Table 3-5 (unit : kWh/Gigabit)

TEC_{GR} : Adder allowance of discrete graphics specified in Table 3-5(unit:kWh)

TEC_{ST} : Adder allowance of memory unit (storage) specified in Table 3-5 if applicable(unit:kWh)

TEC_{DIS} : Adder allowance of enhanced-performance display specified in Table

3-5 if applicable(unit:kWh)

TEC_{SW} : Adder allowance of Switchable Graphics specified in Table 3-5 if applicable(unit:kWh)

TEC_{EEE}: allowance per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet specified in Table 3-5 if applicable (unit: kWh/ Gigabit)

8. Measuring method of Weighted power consumption and Maximum power consumption for Workstations are as follows.

a. Weighted power consumption

Weighted power consumption(W)=$0.35\times P_{OFF}+0.10\times P_{SL}+0.15\times P_{LI}+0.40\times P_{SI}$

P_{OFF} : Measured power consumption in Off Mode (unit:W)

P_{SL} : Measured power consumption in Sleep Mode (unit:W)

P_{LI} : Measured power consumption in Long Idle Mode (unit:W)

P_{SI} : Measured power consumption in Short Idle Mode (unit:W)

b. Maximum weighted power consumption

Maximum weighted power consumption (W)

$=0.28\times(P_{MAX}+N_{HDD}\times 5)+8.76\times P_{EEE}\times 0.65$

P_{MAX} : Measured maximum power consumption(unit:W)

N_{HDD} : Number of installed hard disk drives (HDD) or solid state drives (SSD)

P_{EEE}: EEE allowance of 0.2W per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet port.

9. Measuring method of Maximum Typical Energy Consumption for Thin Clients as follows.

$E_{TMAX}=TEC_{BASE}+TEC_{GR}+TEC_{WOL}+TEC_{DIS}+TEC_{EEE}$

E_{TMAX} : Maximum Typical Energy Consumption (unit : kWh/year)

TEC_{BASE}: Base Allowance 60W

TEC_{GR}:Discrete Graphics allowance 36W

TEC_{WOL}:Wake-on-LAN(WOL) allowance 2W

TEC_{DIS}: Integrated Display allowance for Integrated Desktops (unit:kWh) specified in Table 3-5.

TEC_{EEE}: Energy Efficiency Ethernet incentive for Desktops specified in Table 3-5 if applicable, per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet port (unit : kWh/ Gigabit)

However, adding adder allowance $TEC_{GR,}TEC_{WOL,}TEC_{DIS}$ and TEC_{EEE} shall only be applied to products that offer enabled by default upon shipment.

10. Specified chemical substances denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated

biphenyl and polybrominated diphenyl ether.

11. Evaluation Criteria (3) is to be applied to personal computers. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
12. ***Notebook computers used for ordinary administrative tasks*** denotes battery-driven client-type computers that are primarily used for administrative tasks (excluding cases where the computers are transported, or used for tasks outside of ordinary administrative tasks).
13. ***Simplification of Equipment and Function*** must fulfill the following. It is desirable that the product is not equipped with interface devices such as infrared ray communication port, serial port, parallel port, PC card, S video terminal.
    a. Internal modem, CD/DVD, BD, etc., are not included in the basic package, but can be added at the time of procurement, or connected externally at a later time.
    b. The product is equipped with multiple USB interface for connecting peripherals.

14. The necessary operation running time on a secondary power source (battery) for notebook computers used for ordinary administrative tasks includes the time necessary to close all programs and shut the computer down in case of an emergency such as a blackout.
15. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
16. ***Plastics whose reductive effect of environmental load has been confirmed must have been confirmed*** by a third party such as an LCA expert of its alleviating effect on environmental load, by quantitative, objective and scientific analysis and evaluation of such effect, including possible trade-offs, throughout the lifecycle of the product.
17. The below criteria must be secured for the use of plastic that uses vegetable as raw material.
    a. Information regarding the alleviating effect on environmental load is publicly available.
    b. A system for collection and reuse/recycling of used product is put in place.
    c. Information is provided with regards to the parts that use vegetable based plastic so that there will be no interference with recycling efforts.
18. Each procurement organization must pay considerable attention to the following:
    a. Information regarding specified chemical substances confirmed at the time of procurement must be maintained and preserved until the product is disposed of in order to appropriately manage chemical substances.
    b. Intended use and business content must be carefully reviewed at the time of procurement so that only those equipments and functions necessary will be acquired.

c. A licensed contract method that involves minimizing of accessories including manuals and recovery CD's will be considered.

Table 1 : Standard Energy Consumption Efficiency for Server-type Computers

Category			Standard energy consumption efficiency
CPU type	Number of I/O slots	Number of CPU sockets	
Dedicated CISC	Less than 32		1,950
	32 or more		2,620
RISC	Less than 8		13
	8 to less than 40		31
	40 or more		140
IA64	Less than 10		6.2
	10 or more		22
IA32	0		1.3
	1 to less than 7	Less than 2	1.2
		2 to less than 4	1.9
		4 or more	6.7
	7 or more		7.4

Note:

1. ***Dedicated CISC*** refers to, among CPUs designed to be able to execute multiple commands differing in the number of bits, ones each of which is designed for exclusive use by a computer.
2. ***RISC*** refers to CPUs other than ones designed to be able to execute multiple commands differing in the number of bits.
3. ***IA64*** refers to CPUs, other than dedicated CISC, designed to be able to execute multiple commands differing in the number of bits and having a 64-bit architecture.
4. ***IA32*** refers to CPUs, other than dedicated CISC, designed to be able to execute multiple commands differing in the number of bits and having a 32-bit architecture.
5. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry Notification No. 74 (March 31, 2010), based on the Law Concerning the Rational Use of Energy. Same applies to Table 2.

Table 2: Standard Energy Consumption Efficiency for Client-type Computers

Category				Standard energy consumption efficiency
Client-type computer classified by power source type and number of memory channels	Main memory capacity	Standalone GPU	Screen size	
Battery-driven type with 2 or more memory channels	16 GB or more			2.25
	More than 4 GB to less than 16 GB			0.34
	4 GB or less		17 or more	0.31

		Installed	Less than 17	0.21
		Not installed	12 to less than 17	0.15
			Less than 12	0.21
Non battery-driven type with 2 or more memory channels, having AC adaptor for power supply				0.29
Non battery-driven type with 2 or more memory channels, not having AC adaptor for power supply	16 GB or more			2.25
	More than 4 GB to less than 16 GB	Installed		0.51
		Not installed		0.64
	4 GB or less			0.53
Having less than 2 memory channels				0.51

Note:

1. ***Number of memory channels*** refers to the number of logical channels of the bus interface to the main memory branched out of the memory controller.
2. ***Battery-driven type*** refers to ones capable of running on built-in batteries without relying on power supplied from outside power line.
3. ***Standalone GPU*** refers to, among processors for image data processing, ones having a dedicated local memory.
4. ***Screen size*** refers to the centimeter-denominated quotient, rounded at one digit below the decimal point, of division of the diagonal outer dimension of the display area of the display screen by 2.54.

Table 3-1: Mode Weightings for Desktop, Integrated Desktop Computers and Thin Clients

Mode	Conventional	Proxy Capability (Full Network Connectivity)			
		Base Capability	Remote Wake	Service Discovery/ Name Services	Full Capability
T_{OFF}	45%	40%	30%	25%	20%
T_{SL}	5%	15%	28%	36%	45%
T_{LI}	15%	12%	10%	8%	5%
T_{SI}	35%	33%	32%	31%	30%

Notes:

Proxy Capability (Full Network Connectivity): The ability of the computer to maintain network presence while in Sleep Mode or an alternative low power mode (LPM) with power less than or equal to 10 watts and intelligently wake when further processing is required. Same applies to Table 3-2.

a. Base Capability: To maintain addresses and presence on the network

while in low power mode, the system handles Internet Protocol (IPv4 ARP and IPv6 NS/ND).

b. Remote Wake: While in low power mode, the system is capable of remotely waking upon request from outside the local network. Includes Base Capability.
c. Service Discovery/Name Services: While in low power mode, the system allows for advertising host services and network name. Includes Base Capability.
d. Full Capability: While in low power mode, the system supports Base Capability, Remote Wake, and Service Discovery/Name Services.

Table 3-2: Mode Weightings for Notebook Computers

Mode	Conventional	Proxy Capability (Full Network Connectivity)			
		Base Capability	Remote Wake	Service Discovery/ Name Services	Full Capability
T_{OFF}	25%	25%	25%	25%	25%
T_{SL}	35%	39%	41%	43%	45%
T_{LI}	10%	8%	7%	6%	5%
T_{SI}	30%	28%	27%	26%	25%

Table3-3: Power Supply Efficiency Allowance (A)

Supply Type	Computer Type	Minimum Efficiency at Specified Proportion of Rated Output Current				Minimum Average Efficiency	Allowance PSU
		10%	20%	50%	100%		
Internal Power Supply (IPS)	Desktop	0.81	0.85	0.88	0.85	—	0.015
		0.84	0.87	0.90	0.87	—	0.03
	Integrated Desktop	0.81	0.85	0.88	0.85	—	0.015
		0.84	0.87	0.90	0.87	—	0.04
External Power Supply (EPS)	Notebook	0.83	—	—	—	0.88	0.015
		0.84	—	—	—	0.89	0.03
	Integrated Notebook	0.83	—	—	—	0.88	0.015
		0.84	—	—	—	0.89	0.04

Note:
Average efficiency is the arithmetic mean of efficiencies tested at 25%, 50%, 75%, and 100% of rated output current.

Table 3-4: Base TEC (TEC_{BASE}) Allowances

Category Name	Graphics Capability	Desktop or Integrated Desktop		Notebook	
		Performance	Base Allowance	Performance	Base Allowance
0	Any Graphics	P≤3	69.0	P≤2	14.0
I1	Integrated or Switchable Graphics	3<P≤6	112.0	2<P≤5.2	22.0
I2		6<P≤7	120.0	5.2<P≤8	24.0
I3		P>7	135.0	P>8	28.0
D1	Discrete Graphics	3<P≤9	115.0	2<P≤9	16.0
D2		P>9	135.0	P>9	18.0

Note:

Calculation formula of P is as follows.

P = [# of CPU cores] × [CPU clock speed (GHz)]

Where # of cores represents the number of physical CPU cores and CPU clock speed represents the Max TDP core frequency, not the turbo boost frequency.

Table3-5: TEC_{GR} Functional Adder Allowances for Desktop, Integrated Desktop, Notebook Computers and Thin Client

Adder Allowances Category			Desktop	Integrated Desktop	Notebook
TEC_{MEM}(kWh)			0.8		
TEC_{GR} (kWh)	G1	FB_BW≤16	36		14
	G2	16<FB_BW≤32	51		20
	G3	32<FB_BW≤64	64		26
	G4	64<FB_BW≤96	83		32
	G5	96<FB_BW≤128	105		42
	G6	FB_BW>128 *Frame Buffer Data Width* <192bit	115		48
	G7	FB_BW>128 *Frame Buffer Data Width* ≧=192bit	130		60
TEC_{SW}(kWh)			0.5×G1		N/A
TEC_{EEE}(kWh)			8.76×0.2×(0.15+0.35)		8.76×0.2×(0.10+0.30)
TEC_{ST}(kWh)			26		2.6
TEC_{DIS}(kWh)			N/A	8.76×0.35×(1+EP)×(4×r+0.05×A)	8.76×0.30×(1+EP)×(2×r+0.02×A)

Note:

1. TEC_{GR} applies to only the first dGfx installed in the system, but not Switchable Graphics.
2. FB_BW is the display frame buffer bandwidth in gigabytes per second (GB/s). This should be calculated as follows:
   Data Rate [Mhz] × Frame Buffer Data Width / (8 × 1000)
3. TEC_{SW} may not apply TEC_{DIS}. However, for Desktop and Integrated Desktop systems providing Switchable Graphics and enabling it by default, an allowance equal to 50% of the G1 graphics allowance for the platform type (Desktop or Integrated Desktop) may be applied.
4. TEC_{ST} applies once if system has more than one Additional Internal Storage element.
5. TEC_{DIS} is the allowance for Enhanced-performance Display, as follows.

   EP=0:No Enhanced Performance Display
   EP=0.3: Enhanced Performance Display, the diagonal of the screen is less than 27 inches
   EP=0.75: Enhanced Performance Display, , the diagonal of the screen is 27 inches or more
   r is the Screen resolution in megapixels; and A is viewable screen area in square inches.

(2) Target Setting Guideline

Ratio of the number of computers that meets the criteria, to the total number of computers to be purchased (including lease/rental agreements) in the fiscal year.

6-2. Magnetic Disk Drive Units

(1) Items and Evaluation Criteria

Magnetic disk drive units	**Evaluation Criteria** The energy consumption efficiency shall not exceed the standard energy consumption obtained by the formula of applicable category in Table. **Factors for Consideration** (1) A system for collection and reuse/recycling of used machines, and a system for the proper disposal of components which cannot be reused or recycled is considered. (2) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (3) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. Magnetic disc drive units that meet any of the following criteria will not be regarded as a ***magnetic disc drive unit*** under consideration in the evaluation criteria in this section.
   a. Memory less than 1 gigabyte.
   b. Disc diameter less than 40 mm.
   c. Maximum data transfer speed exceeds 70 gigabytes/second.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table : Calculation formula of standard energy consumption efficiency for Magnetic Disc Drive Units

Category				Calculation formula of standard energy consumption efficiency
Type of magnetic disk unit	Shape and performance of Magnetic disk unit	Revolution speed	Use	
Single unit disk	Disk size exceeding 75 mm; 1 disk			E=exp(2.98×ln(N)-30.8)
	Disk size exceeding 75 mm; 2 or 3 disks			E=exp(2.98×ln(N)-31.2)
	Disk size exceeding 75 mm; 4 disks or more			E=exp(2.11×ln(N)-23.5)
	Disk size exceeding 50 mm but not over 75 mm; 1 disk	5,000 rpm or less		E=exp(2.98×ln(N)-29.8)
		Over 5,000		E=exp(2.98×ln(N)-31.2)

		rpm but less than 6,000 rpm		
		Over 6,000 rpm		E=exp(4.30×ln(N)-43.5)
	Disk size exceeding 50 mm but not over 75 mm; 2 or 3 disks	5,000 rpm or less		E=exp(2.98×ln(N)-31.5)
		Over 5,000 rpm but less than 6,000 rpm		E=exp(2.98×ln(N)-32.2)
		Over 6,000 rpm		E=exp(4.58×ln(N)-46.8)
	Disk size exceeding 50 mm but not over 75 mm; 4 disks or more			E=exp(2.98×ln(N)-31.9)
	Disk size exceeding 40 mm but not over 50 mm; 1 disk			E=exp(2.98×ln(N)-30.2)
	Disk size exceeding 40 mm but not over 50 mm; 2 disks			E=exp(2.98×ln(N)-30.9)
Subsystem			Ones for main frame server	E=exp(1.85×ln(N)-18.8)
			Other	E=exp(1.56×ln(N)-17.7)

Note:

1. ***Main frame server*** refers to server-type computers (computers designed to provide service and the like via a network) mounted with a dedicated CISC (which is, among CPUs designed to be able to execute multiple commands differing in the number of bits, ones each of which is designed for exclusive use by a computer).
2. E and N represent the following values.
   E : Standard energy consumption efficiency
   N : Number of revolutions (per minute)
3. ln represents a logarithm having e as the base.
4. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," in Ministry of Economy, Trade and Industry notification No. 75 (March 31, 2010), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of magnetic disk units meeting the criteria to the total number of magnetic disk units to be purchased (including lease/rental agreements) in the fiscal year.

6-3. Displays

(1) Items and Evaluation Criteria

Displays	**Evaluation Criteria** (1) Shall meet the standard of applicable category in Table 1 and Table 2. (2) Is capable of automatically resuming to a useable mode when task is resumed. (3) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) A system for collection and reuse/recycling of used machines, and a system for the proper disposal of components which cannot be reused or recycled is considered. (2) The item is designed with consideration for its long life and resource efficiency, and reuse of its parts or recycling of its material, taking into account the standards of the Law to Promote Effective Use of Resources. (3) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Displays*** under consideration in the evaluation criteria of this section denotes the standard monitor (computer display, digital picture frame and signage display, etc.) used as the display equipment for computers and visible diagonal screen size is under 61 inches.
2. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
3. Evaluation Criteria (3) is to be applied to personal computer monitors. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
4. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

5. In order to manage chemical substances adequately, each procurement organization is to manage and maintain content information of specific chemical substances until the machine is discarded.

Table 1 : Standard Energy Consumption at on mode for Displays

Product Type and Diagonal Screen Size, d (in inches)	Energy consumption where Dp ≤ 20,000 (in watts)	Energy consumption where Dp > 20,000 (in watts)
d<12.0	≤6.0×r+0.05×A+3.0	≤6.0×r_1+3.0×r_2+0.05×A+3.0
12.0≤d<17.0	≤6.0×r+0.01×A+5.5	≤6.0×r_1+3.0×r_2+0.01×A+5.5
17.0≤d<23.0	≤6.0×r+0.025×A+3.7	≤6.0×r_1+3.0×r_2+0.025×A+3.7
23.0≤d<25.0	≤6.0×r+0.06×A－4.0	≤6.0×r_1+3.0×r_2+0.06×A－4.0
25.0≤d≤61.0	≤6.0×r+0.1×A－14.5	≤6.0×r_1+3.0×r_2+0.1×A－14.5
30.0≤d≤61.0 (for signage display only)	≤0.27×A+8.0	

Notes:

1. ***R*** is screen resolution (megapixels), ***A*** is viewable screen area (square inch). Calculation methods for pixel density D_p and r_1, r_2 is as follows.

$D_p = r \times 10^6 / A$

Where $D_p > 20{,}000$:

$r_1 = 20{,}000 \times A/10^6$, $r_2 = (D_p - 20{,}000) \times A/10^6$

2. ***On Mode*** is the power mode in which the product has been activated, and is providing one or more of its principal functions.
3. ***Signage Display*** is an business use electronic device typically with a diagonal screen size greater than 12 inches and a pixel density less than or equal to 5,000 pixels/in^2.
4. As for computer display that has all characteristics and functions to show from the following a to c, use the value that adds P_{EP} of the allowance to P of the power consumption calculated according to this table for the agreement judgment.
   a. A contrast ratio of at least 60:1 measured at a horizontal viewing angle of at least 85°, with or without a screen cover glass.
   b. A native resolution greater than or equal to 2.3 megapixels.
   c. A color gamut size of at least sRGB as defined by IEC 61966 2-1. (Shifts in color space are allowable as long as 99% or more of defined sRGB colors are supported.)

      visible diagonal screen size is less than 27 inches: $P_{EP}=0.30 \times P$

      visible diagonal screen size is 27 inches or more: $P_{EP}=0.75 \times P$

5. For products with Automatic Brightness Control (ABC) enabled by default, a power allowance (P_{ABC}), use the value that adds P_{ABC} of the allowance to power consumption (P) calculated according to this table for the agreement judgment. If following R_{ABC} is less than 20%, P_{ABC} shall not be added. The method of calculating power consumption decrease rate R_{ABC} and allowance P_{ABC} depends on as follows.

$R_{ABC}=100 \times (P_{300} - P_{10}) / P_{300}$

P_{300} is the energy consumption tested with an ambient light level of 300lux,

P_{10} is the energy consumption tested with an ambient light level of 10lux.

$P_{ABC}=0.10\times P$

6. Measuring method for standard energy consumption shall be measured in accordance with "International Energy Star Program Operating Specification of Appendix Table 2-2 (enforced in June, 2013)."

Table2: Standard of power consumption at sleep mode and off mode for Displays

Power consumption at sleep mode(W)	Power consumption at off mode(W)
≤0.5	≤0.5

Notes;

1. ***Sleep Mode*** is the power mode the product enters after receiving a signal from a connected device or an internal stimulus (The product must wake from this mode on receiving a signal from a connected device, a network, a remote control, and/or an internal stimulus.).
2. The standard of the sleep mode power consumption must use the value calculated that adds the power allowances in sleep mode for bridging or network capabilities in Table 3 or power allowances in sleep mode for additional capabilities in Table 4 for the agreement judgment.
3. ***Off Mode*** is the power mode in which the product is connected to a power source, and is not providing any on mode or sleep mode functions (The product may only exit this mode by direct user actuation of a power switch or control.). It is not indispensable to have this function, this standard is applied only to the machines having this function.
4. Measuring method for standard energy consumption shall be measured in accordance with "International Energy Star Program Operating Specification of Appendix Table 2-2 (enforced in June, 2013)."

Table 3:Power Allowances in Sleep Mode for Bridging or Network Capabilities

Capability	Included Types	Power Allowance (W)
Bridging	USB1.x	0.1
	USB2.x	0.5
	USB3.x DisplayPort (non-video connection), Thunderbolt	0.7
Network	Wi-Fi	2.0
	Fast Ethernet	0.2
	Gigabit Ethernet	1.0

Table 4 : Power Allowances in Sleep Mode for Additional Capabilities

Capability	Included Types	Power Allowance (W)
Sensor	Occupancy Sensor	0.5
Memory	Flash memory-card/smart-card readers, camera interfaces, PictBridge	0.2

(2) Target Setting Guideline

Ratio of the number of displays meeting the criteria to the total number of displays to be purchased (including lease/rental agreements) in the fiscal year.

6-4. Recording Medias

(1) Items and Evaluation Criteria

Recording medias	**Evaluation Criteria** Shall meet one of the criteria below (Evaluation Criteria applies to the case). (1) Recycled plastic makes up at least 30% of the entire weight of the case. (2) Slim-type case that is 5 mm or less in thickness or assembled type case (spindle-type case etc.). (3) Uses vegetable based plastics whose reductive effect of environmental load has been confirmed. (4) In case of paper products, recycled pulp content must be 70% or more. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. **Factors for Consideration** (1) In case of products that include paper as its material, and if virgin pulp is used as the raw material, the pulpwood used is to be obtained from a forest that is conducting a sustainable operation. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Recording medias*** under consideration in the evaluation criteria of this section denotes CD-R, CD-RW, DVD±R, DVD±RW, DVD-RAM, BD-R, BD-RE with a diameter of 12cm.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.).
3. ***Plastics whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
4. Confirmation of the legality and the sustainability of the forest where pulpwood producing paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
   In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the

lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

(2) Target Setting Guideline

Ratio of the number of recording medias meeting the criteria to the total number of recording medias to be purchased in the fiscal year.

7. Office Equipments, etc.

7-1. Paper Shredders

(1) Items and Evaluation Criteria

Paper shredders	**Evaluation Criteria** (1) Stand-by mode power consumption is 1.5W or less. (2) If the machines equipped with low power mode or off mode, the transition time to low-power mode or off mode is set under 10 minutes at the time of shipment. **Factors for Consideration** (1) Contents of specified chemical substances do not exceed the standard content rate. (2) A system for the collection and reuse/recycling of used machines, and a system for the proper disposal of components which cannot be reused or recycled is considered. (3) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (4) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (5) The item takes into consideration the reduction in volume of shredded paper and ease of recycling. (6) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (7) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Paper shredders that meet any of the following criteria will not be regarded as a ***Paper shredder*** under consideration in the evaluation criteria of this section.
    a. The output of shredding motor exceeds 500W.
    b. Shredding motor does not stop automatically when not in use.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
3. ***Stand-by mode power consumption*** denotes electricity that is consumed during inactivity with the power turned on. However, it denotes power consumption in low power mode or off mode, if the machines equipped with these mode.
4. ***Low-power mode.*** This is the low power consumption state that the paper shredder automatically enters after a specified period of inactivity.
5. ***Off mode***. This is the state after the power is shut off by the automatic shut off function that operates after a specified period of inactivity.
6. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.

7. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.

(2) Target Setting Guideline

Ratio of the number of paper shredders meeting the criteria to the total number of paper shredders to be purchased (including lease/rental agreements) in the fiscal year.

7-2. Digital Duplicators

(1) Items and Evaluation Criteria

Digital duplicators	**Evaluation Criteria** (1) Energy consumption rate does not exceed the number noted for each category in Table. (2) When the paper used meets the criteria for specified procurement, product must be capable of using the specified procurement material. **Factors for Consideration** (1) A system for the collection and reuse/recycling of used ink cartridges is considered. (2) Batteries do not include cadmium alloys, lead alloys, or mercury alloys. This is not required, however, if batteries including these substances are collected, reused, or recycled without failure, and/or properly processed. (3) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (4) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (5) Default time to low power mode (the low power consumption state that the copier automatically enters after a specified period of inactivity. Same definition applies below.) and auto shut-off mode (the power is shut off by the automatic off function after a specified period of inactivity. Same definition applies below) is to be set at 5 minutes or less at the time of shipment. For machines whose default time cannot be changed after shipment, the original default time should be maintained. (6) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (7) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Digital duplicators*** are full-auto duplicator system through the method of stencil duplicating with digital reproduction function.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table : Energy Efficiency Criteria for Digital Duplicators

		Energy Efficiency for Digital Duplicators(W)			
		A3 adaptable machines		B4 adaptable machines, A4 adaptable machines	
		Printer function In operation	Printer function Idle	Printer function In operation	Printer function Idle
Printer-interface built-in type		35.5	28	22	20
Printer-interface non-built-in type	With printer interface	35.5	___	22	___
	Without printer interface	___	24	___	19

Note:

1. ***Printer-interface built-in type*** denotes those printers equipped, as a standard feature that cannot be removed as a product, a function to work as an output printer for personal computers.
2. ***Printer-interface non-built-in type*** denotes those printers to which a function to work as an output printer for personal computers can be added, and those printers that cannot function as an output printer for personal computers.
3. ***A3 adaptable machines, B4 adaptable machines,*** and ***A4 adaptable machines*** follow the criteria below:
   A3 adaptable machines: maximum print-out size is 287mm x 409 mm, or larger.
   B4 adaptable machines: maximum print-out size is 250 mm x 353 mm, or larger.
   A4 adaptable machines: maximum print-out size is 204 mm x 288 mm, or larger.
4. Energy efficiency should be calculated using the below formula:

$E = (A + 7 \times B) / 8$

A: Electricity consumption per hour at start up (Wh)

- Turn on the machine, and set printing speed at default. Create the first plate using the test chart, and print using the criteria designated in (1). Immediately follow by creating the second plate under the same conditions, and print using the criteria designated in (1). Leave the machine inactive in that condition.
- The printing speed may not be changed after the machine is turned on.

B: Electricity consumption per hour during normal use (Wh)

- After completing the "A" measurement, create the first plate and print using the criteria designated in (1). Immediately follow by creating the second plate under the same conditions, and print using the criteria designated in (1). Leave the machine inactive in that condition.

Measurement criteria for A and B

a. Number of copies per a plate: 200 copies/plate
b. Number of plates per hour: 2 plates
c. Number of copies per hour: 400 copies/hour
d. Printing speed: The default speed for start-up set at the time of shipment
e. Test chart: A4, area covered by image 4-7 %
f. Standard printing paper: Good quality paper at 64g/m²
g. Environmental criteria during measurement: Temperature: 21±3 degrees C

Humidity: 65±10%
Leave the machine inactive for at least 12 hours before measurement

h. For measurement while printer function is idle, confirm the auto shut-off mode or the switch to low power mode during the inactivity period.
i. The default transition time to low power mode and auto shut-off mode should be set at 5 minutes. This does not apply to machines whose settings cannot be changed after shipment.
j. For measurement while printer function is in operation, the auto shut-off mode cannot be operated. Confirm the switch to low power mode during the inactivity period.

(2) Target Setting Guideline

Ratio of the number of digital duplicators meeting the criteria to the total number of digital duplicators to be purchased (including lease/rental agreements) in the fiscal year.

7-3. Clocks

(1) Items and Evaluation Criteria

Clocks	**Evaluation Criteria** Must fulfill one of the criteria below. (1) Move with solar battery or rechargeable battery (secondary cell), without using disposable batteries. (2) In the case of using both of solar battery and disposable batteries, the disposable batteries will last at least 5 years in usual use situation. (3) In the case of using disposable batteries only, the battery will last at least 5 years. **Factors for Consideration** (1) The disposable battery number of use must be as less as possible. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Clocks*** under consideration in the evaluation criteria of this section denote wall clocks uses in ordinary office and meeting room, excluding large sized clocks uses in the hall, etc.
2. ***Usual use situation*** denotes the clocks are used putting on the opened wall and pillar in the room.
3. Disposable battery's life of Evaluation Criteria (3) is to be measured in accordance with JIS B 7026.
4. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)

(2) Target Setting Guideline

Ratio of the number of clocks meeting the criteria to the total number of clocks to be purchased in the fiscal year.

7-4. Electronic Table Calculators

(1) Items and Evaluation Criteria

Electronic table calculators	**Evaluation Criteria** (1) 50% or more of its power source is obtained from solar battery. (2) Recycled plastic comprises 40% or more by weight of the total plastic used. **Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Electronic table calculators*** under consideration in this section refer to calculators used for ordinary administrative tasks.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)

(2) Target Setting Guideline

Ratio of the number of electronic table calculators meeting the criteria to the total number of electronic table calculators to be purchased in the fiscal year.

7-5. Batteries

(1) Items and Evaluation Criteria

Disposable batteries and small rechargeable batteries	**Evaluation Criteria** Shall meet one of the criteria below. (1) Disposable batteries must exceed the smallest average duration listed in accordance to load resistance in Table below. (2) The battery is a small rechargeable battery (secondary cell). **Factors for Consideration** (1) A system for the collection and reuse/recycling of used small rechargeable battery, and a system for the proper disposal of components which cannot be reused or recycled is considered. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Disposable batteries and small rechargeable batteries*** under consideration in the evaluation criteria of this section denote "D"C" AA" or "AAA".
2. ***Smallest average duration*** is to be measured in accordance to the electric discharge test criteria designated in JIS C 8515. Disposable batteries that comply with the alkaline battery designated in JIS C 8515 meets this Evaluation Criteria.

Table : Smallest Average Duration for Disposable Batteries

IEC designation (size; height : diameter)	Load Resistance (Ω)	Smallest Average Duration	
		Initial Usage	After 12 Months Storage and Recommended Period of Usage
D (61.5mm : 34.2mm)	1.5	520minutes	465minutes
	600(Discharged electricity)	11hours	9.9hours
	10	85hours	76hours
	2.2	16hours	14hours
C (50.0mm : 26.2mm)	3.9(Electrical torch requirement)	800minutes	720minutes
	400mA(Discharged electricity)	8.0hours	7.2hours
	20	80hours	72hours
	3.9(Motor use machine/toy)	14hours	12hours
AA (50.5mm : 14.5mm)	43	60hours	54hours
	3.9	5.0hours	4.5hours
	100mA(Discharged electricity)	15hours	13.5hours

	250mA(Discharged electricity)	5.0hours	4.5hours
	1000mA(Discharged electricity)	220times	195times
	1,500mW 650mW	40times	36times
	24	33hours	29hours
	3.3	190minutes	170minutes
AAA (44.5mm : 10.5mm)	5.1(Electrical torch requirement)	130minutes	115minutes
	24	14.5hours	13.0hours
	5.1(Motor use machine/toy)	2.0hours	1.8hours
	75	44hours	39hours
	600mA(Discharged electricity)	170times	150times
	100mA(Discharged electricity)	7.0hours	6.3hours

(2) Target Setting Guideline

Ratio of the number of batteries (D, C, AA, AAA) meeting the criteria to the total number of batteries to be purchased in the fiscal year.

8. Mobile Telephones, etc.

(1) Items and Evaluation Criteria

Cellular phones PHS Smart Phones	**Evaluation Criteria** (1) Cellular Phones and PHS must fulfill either following a. or b. a. Simplification of additional equipments and functions is considered. b. The system allows for upgrading of applications added to the terminal without exchanging the main body of the machine. (2) The design takes into account the environmental considerations that are included in the evaluation criteria in Table, including the ease of dismantling for the reuse of parts or recycling of material. The implementation of environmentally conscious design can be easily confirmed on websites and other public environmental reports. (3) A system is in place for the collection and material recycling of used products. The implementation rate of system for collection and material recycling can be easily confirmed on websites of manufacturers, communication companies, and sales companies, as well as other environmental reports. (4) A system is in place by the manufacturer, communication company, or sales company for the appropriate disposal of parts of collected products that cannot be recycled or reused. (5) A system is in place by the manufacturer, communication company, or sales company for the repair and storage of renewing expendable parts such as the batteries (maintain for six years or more after the termination of product manufacturing). (6) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) Energy saving devices such as the conservation of electricity and lower electricity consumption in wait mode are put in place. (2) When rare metals are used for the casing or parts, a system is in place to decrease or replace the rare metals as much as possible. (3) A system is in place for the repair and for the storage of replaceable parts for parts other than the main body and expendables. (4) The use of halogenenate noncombustibles on the casing is as minimized as possible. (5) The item is made of as large amount of recycled plastic as possible if plastic components are used for the casing or the parts (including the recharger). (6) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental

	impact upon disposal. (7) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Cellular Phones*** under consideration in the evaluation criteria of this section denote a mobile station telephone device that connects with cellular phone wireless base station by mobile station telephone, and is installed in the device portable, used for ordinary administrative tasks.
2. ***PHS*** under consideration in the evaluation criteria of this section denote a mobile station telephone device that connects with wireless base station public by mobile station telephone, and is installed in the device portable, used for ordinary administrative tasks.
3. ***Smart Phones*** under consideration in the evaluation criteria of this section denote a terminal that combined portable terminal with the cellular phone or PHS, the voice call function and the Web browse function are attached, and users can extend features themselves by adding application softs.
4. ***Simplification of additional equipments and functions*** refers to the limiting of functions to conversations and mail whenever possible.
5. Evaluation Criteria (2). refers to environmentally conscious design indicated in each evaluation criteria of Table.
6. ***A system is in place for the collection and material recycling*** in Evaluation Criteria (3) denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. b. and c.

   a. The manufacturer or the seller has a system (a collection system located at the store, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products, etc.
   b. In order to precipitate appropriate collection, the product name and business name (manufacturer brand name is permissible) are marked on the main body of the products for easy acknowledgement at the time of disposal.
   c. Specific information for the collection of used products, etc. (collection method, collection location, etc.) are available for the users on the package, enclosed printed matter, user's manual, or the website.

   A system for material recycling should fulfill the below requirements d and e.

   d. A system is in place to recycle metal and plastic, etc. as materials.
   e. The information for the material used for the parts is listed as much as possible to enable separation upon disposal.
7. For Evaluation Criteria (5), "maintain for six years or more after the termination of product manufacturing" does not apply in cases when applicable machine cannot be used continuously due to change in the communication system.
8. Specified chemical substances denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.

9. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
10. ***Rare metals*** refers to the 31 types of metals (the seventeen rare earth elements are considered as one metal type) specified at the Special Meeting for the Comprehensive Assessment of Rare Metals at the Mining Panel of the Ministry of Economy, Trade and Industry.
11. ***Recycled Plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
12. Each procurement organization is to take the following into careful account:
    a. When procuring, consider the objective of use and business type in order to determine the necessary type and function.
    b. Consider the type of contract that would enable the minimum amount necessary for manuals and accessories such as a recharger.
    c. Confirm and consider factors for consideration specified in the user's manual when procuring the merchandise.
    d. When disposing the terminal due to a renewal of the mobile phones, etc. terminal, etc., proceed in an appropriate manner using the collection system.

Table: Design Criteria for Environmental Consideration in Mobile Phones, etc.

Objective	Evaluation Criteria	Evaluation Standard
Design with considerations for reduction	Resource efficiency of product (minimization of size and weight)	The volume and weight of product is reduced.
	Energy efficiency of product	The energy consumption of product is reduced. Attempt is made for developing low energy consumption technology.
	Longer life of product	Reliability and durability of the product are either maintained or improving.
Design with considerations for reuse	Design for joint ownership	The recharger etc., is designed with consideration for ease of reuse.
	Design for easy separation and dismantling	Separation and dismantling for reuse can be performed with ease.
Design with considerations for	Reduction of environmental load when recycling	Parts that include rare metals as well as types of ordinary metals

recycling		such as steel, copper and aluminum are understood.
		Use of complex material and processed material that interferes with recycling are reduced.
	Structure allows for ease of separation and dismantling	Structure allows for separation and dismantling to convert into material and parts that can be used as recycled material.
		The structure allows for easy dismantling of different materials.
		Separation and dismantling for recycling is easy.
	Ease of separation is considered	Material can be easily distinguished for recycling.
		The type and quality of plastic used for the casing is unified as much as possible.

(2) Target Setting Guideline

Ratio of the number of products meeting the criteria to the total number of cellular phones, PHS and smart phones to be purchased (including lease and rental) in the fiscal year.

9. Home Electronic Appliances

9-1. Electric Refrigerators, etc.

(1) Items and Evaluation Criteria

Electric refrigerators Electric freezers Electric refrigerator-freezers	**Evaluation Criteria** (1) Energy consumption rate does not exceed the result, rounded down to eliminate decimals, of the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/165. (2) Fluorocarbons are not used as refrigerant or expanding agent for insulation. (3) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) The item is designed with consideration for long-term use and conservation of resources. It should be designed so that it can be easily dismantled and its materials separated to facilitate refurbishment and reuse, based on the evaluation criteria of the Law to Promote Effective Use of Resources. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3) Organic solvent or paint with as low odor as possible is used as coating. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Electric refrigerators, electric freezers, and electric refrigerator-freezers that meet any of the following criteria will not be considered as ***Electric refrigerators***, ***Electric freezers***, or ***Electric refrigerator-freezers*** under consideration in the evaluation criteria of this section.
    a. Those that use thermo-element.
    b. Those that were manufactured for professional use.
    c. Those that use an absorber.
2. ***Fluorocarbons*** are the materials defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001).
3. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
4. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation,

and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008. However Evaluation Criteria (3) does not apply to Electric freezers.

5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
6. In order to manage chemical substances adequately, each procurement organization is to manage and maintain content information of specific chemical substances until the machine is discarded.
7. Evaluation Criteria (1) will be assumed as follows.
    a. As for Refrigerators with a rated internal volume is up to 250 liters, until the market obtains adequate supply of products that fulfill the criteria, the product may be considered as specified procurement goods when energy consumption does not exceed the result of the standard energy consumption rate calculated using the formula for each category listed in Table. The period of time for which the exception is applicable will be determined in consideration with market trend.
    b. As for Refrigerators with a rated internal volume is over 250 liters up to 400liters, one year transition period will be applied in the fiscal year 2015, the products may be considered as specified procurement goods when energy consumption rate shall not exceed the result, rounded down to eliminate decimals, of the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/133.

Table : Formula for Calculating Standard Energy Consumption Efficiency Rate for Electric Refrigerators, etc.

<table>
<tr><td colspan="4">Category</td><td rowspan="2">Calculation formula of standard energy consumption efficiency</td></tr>
<tr><td>Product type</td><td>Cooling type</td><td>Rated internal volume</td><td>Number of doors for the refrigerator section</td></tr>
<tr><td rowspan="4">Refrigerator or Refrigerator-freezer</td><td>Cold air-natural convection type</td><td></td><td></td><td>E=0.844xV1+155</td></tr>
<tr><td rowspan="3">Cold air Forced circulation type</td><td>Up to 300 liters</td><td></td><td>E=0.774xV1+220</td></tr>
<tr><td rowspan="2">Over 300 liters</td><td>1</td><td>E=0.302xV1+343</td></tr>
<tr><td>2 or more</td><td>E=0.296xV1+374</td></tr>
<tr><td rowspan="2">Electric Freezer</td><td>Cold air-natural convection type</td><td colspan="2"></td><td>E=0.844xV2+155</td></tr>
<tr><td>Cold air</td><td colspan="2">Up to 300 liters</td><td>E=0.774xV2+220</td></tr>
</table>

	Forced circulation type	Over 300 liters	E=0.302xV2+343

Note:

1. E, V1 and V2 stand for below amount:
   E: Standard Energy Consumption Efficiency Rate (unit: kWh/year)
   V1: Adjusted internal volume (to the standard internal volume of the freezer, multiply 2.20 for three-star type freezer, 1.87 for two-star type freezer, and 1.54 for one-star type freezer, and add the standard internal volume of the storage area aside from the freezer room, and round the decimals up if five or more and down if four or less). (unit: L)
   V2: Adjusted internal volume (to the standard internal volume of the freezer, multiply 2.20 for three-star type freezer, 1.87 for two-star type freezer, and 1.54 for one-star type freezer, and round the decimals up if five or more and down if four or less). (unit: L)
2. Energy consumption efficiency for Electric Refrigerators and Electric Refrigerator-freezers is calculated according to "3 Energy Consumption Efficiency Measurement Types (2)," in Ministry of Economy, Trade and Industry notification No.34 (March 1, 2013), based on the Law Concerning the Rational Use of Energy.
3. Energy consumption efficiency for Electric Freezers is calculated according to "3 Energy Consumption Efficiency Measurement Types (2)," in Ministry of Economy, Trade and Industry notification No.35 (March 1, 2013), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of refrigerators, etc. (refrigerators, freezers, and refrigerator-freezers) meeting the criteria to the total number of refrigerators, etc. to be purchased (including lease/rental agreements) in the fiscal year.

9-2. Television Receivers

(1) Items and Evaluation Criteria

Television Receivers	**Evaluation Criteria** (1)For television receivers that employ liquid crystal panel (referred to as liquid crystal television hereinafter), and that employ plasma display panel (referred to as plasma television hereinafter), energy consumption rate does not exceed the result, rounded down to eliminate decimals, of the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/198. (2)The power consumption in the remote control standby mode is 0.5W or less. (3)Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1)Design consideration takes into account product life, efficient use of material, reuse of parts, or recycling of raw material, in compliance with evaluation criteria for Standards for the Promotion of Efficient Use of Material. (2)The item uses as large amount of recycled plastic as possible if plastic components are used. (3)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4)A system for collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Those products that satisfy one of the below criteria is not included in ***Television receivers*** under consideration:
   1) Television with Cathode-ray Tube.
   2)Those manufactured for use by the industry.
   3) Cathode-ray tube style that can respond to multi-scanning, whose horizontal frequency exceeds 33.8 kilo hertz.
   4) Those manufactured for use by tourists from abroad.
   5) Rear projection style products.
   6) The size of the receiver is 10V or less.
   7) Wireless products.
   8) Display for electronic calculators that are capable of receiving television.
2. ***The consumed power in the remote control standby mode*** in Evaluation Criteria (2) denotes power consumption in the state to turn off power by remote control, applies to the infrared remote control.
3. Specified chemical substances denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.

4. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
6. In order to manage chemical substances adequately, each procurement organization is to manage and maintain content information of specific chemical substances until the item in question is discarded.
7. Evaluation criteria (1) for television receivers, one year transition period will be applied in the fiscal year 2015, the products may be considered as specified procurement goods if energy consumption rates of those do not exceed the result, rounded down to eliminate decimals, of the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/149. The period of time for which the exception is applicable will be determined in consideration with market trend.

Table : Standard Energy Consumption Efficiency and its Calculation Formula of Liquid Crystal Television and Plasma Television

Category				Standard energy consumption efficiency or calculation formula
Number of pixels	Television receiver size	Dynamic image Display	Additional function(s)	
FHD	below 19V size	Liquid crystal normal	With no added functions	E=59
			With 1 added function	E=71
			With 2 added functions	E=83
			With 3 added functions	E=95
		Liquid crystal double-speed	With no added functions	E=74
			With 1 added function	E=86
			With 2 added functions	E=98
			With 3 added functions	E=110
	Not below 19V size, but below 32V size	Liquid crystal normal	With no added functions	E=2.0×S+21
			With 1 added function	E=2.0×S+33
			With 2 added functions	E=2.0×S+45
			With 3 added functions	E=2.0×S+57
		Liquid crystal double-speed	With no added functions	E=2.0×S+36
			With 1 added function	E=2.0×S+48
			With 2 added functions	E=2.0×S+60
			With 3 added functions	E=2.0×S+72

		Liquid crystal quadruple speed or plasma	With no added functions	E=2.0×S+58
			With 1 added function	E=2.0×S+70
			With 2 added functions	E=2.0×S+82
			With 3 added functions	E=2.0×S+94
	32V size or larger	Liquid crystal normal	With no added functions	E=6.6×S-126
			With 1 added function	E=6.6×S-114
			With 2 added functions	E=6.6×S-102
			With 3 added functions	E=6.6×S-90
		Liquid crystal double-speed	With no added functions	E=6.6×S-111
			With 1 added function	E=6.6×S-99
			With 2 added functions	E=6.6×S-87
			With 3 added functions	E=6.6×S-75
		Liquid crystal quadruple speed or plasma	With no added functions	E=6.6×S-89
			With 1 added function	E=6.6×S-77
			With 2 added functions	E=6.6×S-65
			With 3 added functions	E=6.6×S-53
Others	Less than 19V type	Liquid crystal normal	With no added functions	E=44
			With 1 added function	E=56
			With 2 added functions	E=68
			With 3 added functions	E=80
		Liquid crystal double-speed	With no added functions	E=59
			With 1 added function	E=71
			With 2 added functions	E=83
			With 3 added functions	E=95
	19V type or more Less than 32V type	Liquid crystal normal	With no added functions	E=2.0×S+6
			With 1 added function	E=2.0×S+18
			With 2 added functions	E=2.0×S+30
			With 3 added functions	E=2.0×S+42
		Liquid crystal double-speed	With no added functions	E=2.0×S+21
			With 1 added function	E=2.0×S+33
			With 2 added functions	E=2.0×S+45
			With 3 added functions	E=2.0×S+57
		Liquid crystal quadruple speed or plasma	With no added functions	E=2.0×S+43
			With 1 added function	E=2.0×S+55
			With 2 added functions	E=2.0×S+67
			With 3 added functions	E=2.0×S+79
	32V type or more	Liquid crystal normal	With no added functions	E=6.6×S-141
			With 1 added function	E=6.6×S-129
			With 2 added functions	E=6.6×S-117
			With 3 added functions	E=6.6×S-105
		Liquid crystal double-speed	With no added functions	E=6.6×S-126
			With 1 added function	E=6.6×S-114
			With 2 added functions	E=6.6×S-102
			With 3 added functions	E=6.6×S-90
		Liquid crystal quadruple	With no added functions	E=6.6×S-104
			With 1 added function	E=6.6×S-92

		speed or plasma	With 2 added functions	E=6.6×S-80
			With 3 added functions	E=6.6×S-68

Note:

1. ***FHD*** refers to ones having 1,080 or more pixels in the vertical direction and 1,920 or more in the horizontal direction.
2. ***Television receiver size*** refers to the centimeter-denominated quotient, rounded at the decimal point, of division of the diagonal dimension of the driven display area of the display screen by 2.54.
3. ***Dynamic image display*** refers to or another of the following.
   Liquid crystal normal: What uses a liquid crystal panel to display 60 or more but less than 120 still frames per second.
   Liquid crystal double speed: What uses a liquid crystal panel to display 120 or more but less than 240 still frames per second.
   Liquid crystal quadruple speed: What uses a liquid crystal panel to display 240 or more still frames per second.
   Plasma: What performs displaying by using a plasma display panel.
4. ***Additional functions*** refers to DVD (solely those having a video recording function), Magnetic disc drive units drive unit, double digital tuner and blue ray disk recorder.
5. E and S represent the following numeric values.
   E : standard energy consumption efficiency (unit:kWh/ year)
   S : Television receiver size
6. Energy consumption efficiency is calculated according to "2 Energy Consumption Efficiency Measurement Methods 2-2," in Ministry of Economy, Trade and Industry notification No. 24 (February 18, 2010), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of television receivers meeting the criteria to the total number of television receivers to be purchased (including lease and rental agreements) in the fiscal year.

9-3. Electric Toilet Seats

(1) Items and Evaluation Criteria

Electric toilet seats	**Evaluation Criteria** Energy consumption efficiency shall not exceed the result, decimal point eliminated, of the standard energy efficiency rate calculated using the formula for each category listed in Table multiplied by 100/159. **Factors for Consideration** (1) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Products that meet the below criteria will not be considered ***Electric toilet seats*** under consideration in the evaluation criteria of this section:
   a. Electric toilet seats that use warm water supplied from a separate warm water system.
   b. Electric toilet seats, those are equipped only with warm water washing apparatus.
   c. Portable electric toilet seats that are used for welfare purposes.
   d. Electric toilet seats that are primarily used in train cars.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
3. As for instantaneous type among warm-water-shower toilet seats have a timer or a function to distinguish non-use situation (nighttime etc.) as a power saving method, one year transition period will be applied in the fiscal year 2015, the products may be considered as specified procurement goods when energy consumption rate shall not exceed the result, decimal point eliminated, of the standard energy efficiency rate calculated using the formula for each category listed in Table multiplied by 100/129. The transition period will be determined taking into consideration of the market trends.
4. Warm toilet seats and warm-water storage type among warm-water-shower toilet seat, which does not exceed the result of the standard energy consumption rate calculated using the formula for each category listed in Table, will be considered designated procurement item since the products will supply enough for the market. The period will be determined taking into consideration of the market trends.

Table : Standard Energy Consumption Efficiency for Electric Toilet Seats

Category		Standard Energy Consumption Efficiency
Availability of the shower function	Availability of the water tank	
Warm toilet seat (Without a shower function)	-	141
Warm-water-shower toilet seat (With a shower function) (without cleansing function)	Warm-water storage type (With a warm-water tank)	183
	Instantaneous type (Without a warm-water tank)	135

Note:

1. ***Warm toilet seat*** refers to toilet seats with a warming function only.
2. ***Warm-water-shower toilet seat*** refers to warm toilet seats equipped with built-in warm-water-shower equipment.
3. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry notification No. 288 (November 26, 2007), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of electric toilet seats meeting the criteria to the total number of electric toilet seats to be purchased (including lease/rental agreements) in the fiscal year.

9-4. Microwave Ovens

(1) Items and Evaluation Criteria

Microwave ovens	**Evaluation Criteria** (1) Energy consumption efficiency does not exceed the amount listed in the appropriate category in the Table. (2) Stand-by mode power consumption does not exceed 0.05W. (3) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item uses a large amount of recycled components that have already been used, and uses as large amount of recycled plastic as possible if plastic components are used. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Products that meet the criteria below will not be considered ***Microwave ovens*** under consideration in the evaluation criteria of this section:
   (1) Products equipped with gas ovens.
   (2) Products manufactured for commercial use.
   (3) Products that exclusively use rated power input of 200 voltages.
   (4) Products with interior height of less than 135 millimeters.
   (5) Products that are integrated into system kitchens, etc.
2. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
3. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
4. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

5. In order to manage chemical substances adequately, each procurement organization is to manage and maintain content information of specific chemical substances until the item in question is discarded.

Table: Standard Energy Consumption Rate for Microwave Ovens

Category			Standard Energy Consumption Rate
Function	Heating method	Interior capacity	
Products that are not equipped with the conventional oven function (single function microwave oven)			60.1
Products that are equipped with the conventional oven function	Heater is exposed (does not include those with convection function)	Less than 30 L	73.4
		30L or more	78.2
	Heater is not exposed (does not include convection function)	Less than 30L	70.4
		30L or more	79.6
	Convection oven style		73.5

Note:

1. ***Interior capacity*** is calculated in accordance with the effective size of the heating compartment determined by regulations for designating product quality of electric appliances based on household appliance quality display regulations (1962 regulation No.104).
2. Energy consumption efficiency is calculated according to "2 Energy Consumption Efficiency Measurement Methods," in Ministry of Economy, Trade and Industry notification No. 59 (March 29, 2006), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of microwave ovens meeting the criteria to the total number of microwave ovens to be purchased in the fiscal year.

10. Air Conditioners, etc.

10-1. Air Conditioners

(1) Items and Evaluation Criteria

Air conditioners	**Evaluation Criteria** (1) Energy consumption efficiency of air conditioners, that are applicable to Appendix 3(7) of Rules for Indicating Quality of Domestic Products and are wall-mounted non-ducted type (excluding multi-types with ability to control indoor units individually) with cooling ability of 4.0kW or lower, does not fall below the energy consumption rate from Table 1, multiplied by 114/100, calculated to two decimal places and then rounded off to one decimal place. (2) Energy consumption efficiency of domestic air conditioners that do not fit into criteria (1) does not fall below the energy consumption rate from Table 2, multiplied by 114/100, calculated to two decimal places and then rounded off to one decimal place. (3) Energy consumption efficiency of industrial air conditioners does not fall below the applicable basic energy consumption of Table 3, or the energy consumption rate from Table 3, multiplied by 88/100, calculated to two decimal places and then rounded off to one decimal place. (4) Substances that harm the ozone layer are not used for the refrigerant. (5) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. **Factors for Consideration** (1) Global warming potentials of the materials used for the refrigerant of domestic air conditioners are 750 or smaller. The material with a small global warming potential to the extent possible are used for the refrigerant for commercial air conditioners. (2) The item is designed with consideration for long-term use and conservation of resources. It should be designed so that it can be easily dismantled and its materials separated to facilitate refurbishment and reuse, based on the evaluation criteria of the Law to Promote Effective Use of Resources. (3) In the designing and manufacturing the product, reduction of the amount of the filled refrigerant, the further prevention of leakage and the ease of recovery of refrigerant are considered. Moreover, the informations above are disclosed. (4) The item is made of as large amount of recycled plastic as possible if plastic components are used. (5) Packaging and stowage is to be as simple as possible and take into consideration ease of recycling and reduced environmental

	impact upon disposal. (6) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Items that meet any of the criteria below will not be considered as ***Air conditioners*** under consideration in the evaluation criteria of this section:
   a. Cooling capacity exceeds 28kW (for multi-type air conditioner, cooling capacity exceeds 50.4kW).
   b. Wind type or Wall type and only for cooling.
   c. Uses water-cooled engine.
   d. Does not use compressed motor.
   e. Uses energy other than electricity as a source of heat.
   f. The maintenance of machinery function or hygienic regulation of food.
   g. Primary function of the structure is to convey cooled outdoor air indoors.
   h. Target air conditioners.
   i. Air conditioners designed for use in automobiles and other vehicles.
   j. Duct air control system for highly airtight and highly insulated
   k. Structure includes regenerator (includes those that are also used for heating) exclusively for the purpose of storing heat for cooling.
   l. Structure operates compressor, fan, and other major components by electricity generated by own solar cell module.
   m. One having floor heating function or hot-water supply function.
   n. Heat recovery method multi air conditioner.
2. ***Multi-type air conditioners*** refer to a type that has two or more indoor units connected to an outdoor unit.
3. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
4. Item (5) in Evaluation Criteria will apply to unit type air conditioners (excludes packaged types), the standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
5 Factors for consideration (1) apply to the designated products defined as the Fluorocarbons prescribed in Article 2, Paragraph 2 of the Act for Rationalized Use and Proper Management of Fluorocarbons (Act No. 64 of 2001).
6. ***Global warming potential*** in this section denotes the numerical value that showed degree to which is heat-trapping gas brings global warming in ratio to which carbon dioxide brings global warming.
7. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
8. In order to manage chemical substances adequately, each procurement organization is

to manage and maintain content information of specific chemical substances until the item in question is discarded.

Table 1 : Standard Energy Consumption Efficiency for the Air-conditioners, applicable to Appendix 3(7) of Rules for Indicating Quality of Domestic Products, is a wall-mounted non-ducted type (excluding multi-types with ability to control indoor units individually), with cooling ability of up to 4.0kW

Category		Standard energy consumption efficiency
Cooling capacity	Dimension type of indoor units	
Up to 3.2kW	Dimension-defined type	5.8
	Free-dimension type	6.6
Over 3.2 kW up to 4.0kW	Dimension-defined type	4.9
	Free-dimension type	6.0

Note:

1. ***Dimension type of indoor units*** denotes indoor unit means that air conditioner models whose indoor unit has horizontal width of 800 mm or less and height of 295 mm or less shall be defined as a dimension-defined type. Air conditioners other than those of dimension-defined type shall be free-dimension type.
2. Energy consumption is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry notification No.213 (June 22, 2009), based on the Law Concerning the Rational Use of Energy. Same applies for Table 2.

Table 2 : Standard Energy Consumption Efficiency for Domestic Air Conditioners

Category		Standard energy consumption efficiency
Unit type	Cooling capacity	
Non-ducted window/ wall-installed type	Over 4.0 kW up to 5.0 kW	5.5
	Over 5.0 kW up to 6.3 kW	5.0
	Over 6.3 kW up to 28.0 kW	4.5
Non-ducted wall-mounted type (except multi-type operating indoor units individually)	Up to 3.2 kW	5.2
	Over 3.2 kW up to 4.0 kW	4.8
	Over 4.0 kW up to 28.0kW	4.3
Multi-type operating indoor units individually	Up to 4.0 kW	5.4
	Over 4.0 kW up to 7.1 kW	5.4
	Over 7.1 kW up to 28.0 kW	5.4

Table 3 : Standard Energy Consumption Efficiency for Industrial Air Conditioners

Category			Standard energy consumption efficiency or its calculation formula
Unit type and function	Indoor unit type	Cooling capacity	
Several combination or	Cassette type for	Up to 3.6 kW	E=6.0
		Over 3.6 kW up to 10.0 kW	E=6.0-0.083 x (A-3.6)

other than the below	all sides	Over 10.0 kW up to 20.0 kW	E=6.0-0.12 x (A-10)
		Over 20.0 kW up to 28.0 kW	E=5.1-0.060 x (A-20)
	Other than cassette type for all sides	Up to 3.6 kW	E=5.1
		Over 3.6 kW up to 10.0 kW	E=5.1-0.083 x (A-3.6)
		Over 10.0 kW up to 20.0kW	E=5.1-0.10 x (A-10)
		Over 20.0 kW up to 28.0kW	E=4.3-0.050 x (A-20)
Multi-type operating indoor units individually		Up to 10.0 kW	E=5.7
		Over 10.0 kW up to 20.0 kW	E=5.7-0.11 x (A-10)
		Over 20.0 kW up to 40.0 kW	E=5.7-0.065 x (A-20)
		Over 40.0 kW up to 50.4 kW	E=4.8-0.040 x (A-40)
Floor type Indoor units duct connected type or anything like this	Non-ducted type	Up to 20.0 kW	E=4.9
		Over 20.0 kW up to 28.0 kW	E=4.9
	Ducted type	Up to 20.0 kW	E=4.7
		Over 20.0 kW up to 28.0 kW	E=4.7

Note:

1. ***Ducted type air conditioners*** refer to systems connected to ducts at the outlet.
2. ***E and A*** denotes the following.
   E: Standard Energy Consumption (unit: annual performance factor)
   A: Cooling capacity (unit: kW)
3. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (3)," in Ministry of Economy, Trade and Industry notification No.213 (June 22, 2009), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of air conditioners meeting the criteria to the total number of air conditioners to be purchased (including lease/rental agreements) in the fiscal year.

10-2. Gas Heat Pump Air Conditioners

(1) Items and Evaluation Criteria

Gas heat pump air conditioners	**Evaluation criteria** (1) Coefficient of performance exceeds the number listed in the applicable category in Table. (2) Refrigerant does not include material capable of destroying the ozone layer. **Factors for consideration** (1) The materials with a low global warming potential to the extent possible are used for the refrigerant. (2) The item is designed so that it can be easily dismantled for recycling. (3) The item is made of as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Gas heat pump air conditioner*** includes units whose rated cooling capacity is between 7.1 and 28kW under consideration in the evaluation of this section.
2. ***Global warming potential*** in this section denotes the numerical value that showed degree to which is heat-trapping gas brings global warming in ratio to which carbon dioxide brings global warming.
3. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table: Coefficient of Performance for Gas Heat Pump Air Conditioners

Category	Coefficient of Performance Type	Coefficient of Performance
JIS applicable models	Annual Performance Factor (APF)	1.42
JIS non-applicable models	Coefficient of performance for primary energy conversion (COP)	1.15

Note:

1. Annual Performance Factor (APF) is calculated using JIS B 8627-1:2006.
2. Coefficient of Performance (COP) for primary energy conversion is calculated using the following formula. For units that can be used with rated frequency of both 50 and 60 Hertz, the smaller of the numbers derived from calculations using both numbers will apply.

   COP=(Cc/(Egc+Eec)+Ch/(Egh+Eeh))/2

   COP：Coefficient of performance for primary energy conversion

Cc : Standard Cooling Capacity(unit : kW)

Egc : Cooling gas consumption(unit : kW)

Eec : Amount of primary energy (unit : kW) calculated by substituting 1kWh cooling electricity consumption(unit : kW) with 9,760kJ.

Ch : Standard heating capacity(unit : kW)

Egh : Heating gas consumption(unit : kW)

Eeh : Amount of primary energy (Unit : kW) calculated by substituting 1kWh heating electricity consumption (unit : kW) with 9,760kJ.

3. Standard cooling capacity, cooling gas consumption, cooling electricity consumption, standard heating capacity, heating gas consumption, and heating electricity consumption are evaluated in accordance with methods designated by JIS B 8627-2:2000 or B 8627-3:2000.
4. Effective electricity consumption of the outdoor unit will be used for cooling electricity consumption and heating electricity consumption.

(2) Target Setting Guideline

Ratio of the number of gas heat pump air conditioners meeting the criteria to the total number of gas heat pump air conditioners to be purchased (including lease/rental agreements) in the fiscal year.

10-3. Space Heaters

(1) Items and Evaluation Criteria

Space heaters	**Evaluation Criteria** Must fulfill at least one of below. (1)Energy consumption efficiency in gas space heaters shall not fall below the standard energy consumption efficiency of applicable category in Table 1. (2)Energy consumption efficiency in oil space heaters shall not fall below the standard energy consumption efficiency or its calculation formula of applicable category in Table 2. **Factors for Consideration** (1) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Space heaters*** under consideration in the evaluation criteria of this section must use gas or oil, and should not meet any of the criteria below:
    a. The item employs non-vented types.
    b. The item uses gas (excluding city gas categorized under group 13A (Group specified in Article 25 Section 3 of Gas Industry Law Enforcement Regulation (Ministry of International Trade and Industry Ordinance 97, 1970) and liquefied petroleum gas) as its energy source.
    c. Vented gas space heaters.
    d. Vented oil space heaters with maximum fuel consumption rate greater than 4.0L/h.
    e. Direct vent type oil space heaters with maximum fuel consumption rate greater than 2.75L/h.

2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table 1. Standard Energy Consumption Efficiency for Gas Space Heaters

Category	Standard Energy Consumption Efficiency
Direct vent type	82.0

Note:

Energy consumption efficiency is calculated according to “3 Energy Consumption Efficiency Measurement Methods,” in Ministry of Economy, Trade and Industry

notification No. 55 (March 29, 2006), based on the Law Concerning the Rational Use of Energy. Same applies for Table 2.

Table 2. Standard Energy Consumption Efficiency or Its Calculation Formula for Oil Space Heaters

Category		Standard Energy Consumption Efficiency or Its Calculation Formula
Air supply and exhaust type	Heat transfer type	
Direct Vent Type	Natural convection type	83.5
	Forced convection type	86.0
Vented type	Radiation type	69.0
	Radiating type with maximum fuel consumption amount of 1.5L/h or less	67.0
	Radiating type with maximum fuel consumption amount of over 1.5L/h	E = -3.0 x L + 71.5

Note:

E and L stand for the following:

E: Standard energy consumption efficiency (unit: %)

L: Maximum fuel consumption amount (unit: L/h)

(2) Target Setting Guideline

Ratio of the number of space heaters meeting the criteria to the total number of space heaters to be purchased (including lease/rental agreements) in the fiscal year.

11. Water Heaters, etc.

11-1 Electric Hot Water Supply System

(1) Items and Evaluation Criteria

Heat pump style electric hot water supply system	**Evaluation Criteria** (1) For residential use heat pump style electric hot water supply system, energy consumption efficiency must not fall below the standard energy consumption efficiency of applicable category in Table. (2) For business use heat pump style electric hot water supply system, coefficient of performance is 3.50 or higher. (3) Fluorocarbons are not used as refrigerant. **Factors for Consideration** (1) The materials with a low global warming potential to the extent possible are used for the refrigerant. (2) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (3) The item is made of as large amount of recycled plastic as possible if plastic components are used. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Equipments having a heating function will not be considered as ***Heat pump style electric hot water supply system*** in the evaluation criteria.
2. The coefficient of performance for business use heat pump style electric hot water supply system is to be calculated using the below formula:

Coefficient of performance (COP) = Rated heating capacity / Rated consumed electricity

Rated heating capacity:
Heat that is supplied to the circulating hot water when the heat pump unit is operated in accordance with the rated heating criteria listed in Attached Table. For systems that are simultaneously heated with a heater, add the amount of heat generated by the heater. (unit: kW)

Rated consumed electricity:
The sum of electricity consumed when the heat pump unit is operated in accordance with the rated heating criteria listed in Attached Table. For systems that are simultaneously heated with a heater, add the amount of electricity consumed by the heater. (unit: kW)

Attached Table : Rated Heating Criteria

Category	Rated heating criteria (unit: degrees C)
External temperature (DB/WB)	16/12
Temperature of supplied water	17
Temperature of heated water	65

Temperature of supplied water: Temperature of city water that is supplied to the heat pump method hot water supply system. (unit: degrees C)

Temperature of heated water: Temperature at the output of the heat pump unit. (unit: degrees C)

3. ***Fluorocarbons*** are the materials defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001).
4. ***Global warming*** potential in this section denotes the numerical value that showed degree to which is heat-trapping gas brings global warming in ratio to which carbon dioxide brings global warming.
5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
6. Evaluation Criteria (3) does not apply to the products for business use heat pump style electric hot water supply system. However substances harmful to the ozone layer not used.
7. Evaluation criteria(1) for residential use heat pump style electric hot water supply system, one year transition period will be applied in the fiscal year 2015, the products may considered as a specified procurement goods when they meet the Evaluation Criteria(1) of Heat pump style electric hot water supply system stated in ***Basic Policy on Promoting Green Purchasing***(Cabinet Decision February 5, 2013). The period of time for which the exception is applicable will be determined in consideration with market movement.

Table : Standard of Energy Consumption for Residential Use Heat Pump Style Electric Hot Water Supply System

Assumed number of household	Tank capacity	Specification	Warm keep function	Tank number	Standard of energy consumption efficiency
Normal (4 persons)	Less than 240 L	Other than Specification for Cold Region	with	One tank	2.8
				Multi tank	2.4
			without	One tank	3.0
				Multi tank	2.6
		Specification for Cold Region	With	One tank	2.3
				Multi tank	2.0
			without	One tank	2.6

				Multi tank	2.3
	Over 240 L less than 320 L	Other than Specification for Cold Region	with	One tank	2.8
				Multi tank	2.8
			without	One tank	3.2
				Multi tank	2.8
		Specification for Cold Region	with	One tank	2.3
				Multi tank	2.0
			without	One tank	2.7
				Multi tank	2.3
	Over 320 L less than 550 L	Other than Specification for Cold Region	with	One tank	3.3
				Multi tank	2.8
			without	One tank	3.2
				Multi tank	2.8
		Specification for Cold Region	with	One tank	2.7
				Multi tank	2.3
			without	One tank	2.7
				Multi tank	2.3
	Over 550 L	Other than Specification for Cold Region	with	One tank	2.9
				Multi tank	2.5
			with	One tank	2.9
				Multi tank	2.5
		Specification for Cold Region	with	One tank	2.4
				Multi tank	2.1
			without	One tank	2.5
				Multi tank	2.2
Few (2 persons)	—	Other than Specification for Cold Region	with	—	2.4
			without		2.8
		Specification for Cold Region	with		2.0
			without		2.4

Notes:

1. ***Tank capacity*** denotes the tank capacity in volume based on JIS C 9220, which could storage water.
2. ***Specification for Cold Region*** denotes a specification based on JIS C 9220, assumed to be used in terrible cold region in winter.
3. ***Warm keep function*** denotes the circulation heating function for hot water of bath.

(2) Target Setting Guideline

Ratio of the number of heat pump style electric hot water supply system meeting the criteria to the total number of heat pump style electric hot water supply system to be purchased (including lease/rental agreements) in the fiscal year.

11-2 Gas Water Heaters

(1) Items and Evaluation Criteria

Gas water heaters	**Evaluation Criteria** Energy consumption efficiency shall not fall below the energy consumption efficiency listed in Table for each category. **Factors for Consideration** (1) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Items that meet any of the criteria below will not be considered as ***Gas water heaters*** under consideration in the evaluation criteria of this section:
   a. Storage-style hot water supply system.
   b. Items that were designed for commercial use.
   c. Items that use gas (excluding city gas categorized under group 13A and liquefied petroleum gas) as its fuel source.
   d. Gas bath furnaces that are designed to be installed at a bath tub for heating bath water, and equipped with a function to prevent imperfect combustion.
   e. Direct vent type gas bath furnaces which require a duct connection for combustion air supply and exhaust.

2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table: Standard Energy Consumption Efficiency for Gas Water Heaters

Category				Standard energy consumption efficiency
Type of gas water heater	Ventilation type	Circulation type	Air supply and exhaust type	
Gas instant water heater	Natural ventilation type		Non-vented type	83.5
			Other than non-vented type	78.0
	Forced ventilation type		Other than outdoor type	80.0
			Outdoor type	82.0
Bath tub gas water heater(with no hot water supply functions)	Natural ventilation type	Natural circulation type	Vented type or direct vent type (the height where the air supply and exhaust part penetrates external wall is as vented types)	75.5
			Direct vent type (other than types of the height where the air supply and exhaust part penetrates external wall is as vented types)	71.0
			Outdoor type	76.4
	Forced ventilation type	Natural circulation Type		70.8
		Forced circulation Type		77.0
Bath tub gas water heater (with hot water supply functions)	Natural ventilation type	Natural circulation Type	Vented type or direct vent type (the height where the air supply and exhaust part penetrates external wall is as vented types)	78.0
			Direct vent type (other than types of the height where the air supply and exhaust part penetrates external wall is as vented types)	77.0
			Outdoor type	78.9
	Forced ventilation type	Natural circulation type		76.1
		Forced circulation Type	Other than outdoor type	78.8
			Outdoor type	80.4
Gas heating equipment (with no hot				

water supply functions)				83.4
Gas heating equipment (with hot water supply functions)				83.0

Note:
Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," in Ministry of Economy, Trade and Industry notification No. 57 (March 29, 2006), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of gas water heaters meeting the criteria to the total number of gas water heaters to be purchased (including lease/rental agreements) in the fiscal year.

11-3 Oil Water Heaters

(1) Items and Evaluation Criteria

Oil water heaters	**Evaluation Criteria** Energy consumption efficiency shall not fall below the energy consumption efficiency listed in Table for each category. **Factors for Consideration** (1)The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4)A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Items that meet any of the criteria below will not be considered as ***Oil water heaters*** under consideration in the evaluation criteria of this section:
    a. Pot style bath furnace equipped with a burner.
    b. Items that were designed for commercial use.
    c. Items equipped with a structure for burning firewood.
    d. Hot water boilers with gauge pressure of over 0.1MPa.

2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table: Standard Energy Consumption Efficiency for Oil Water Heaters

Category			Standard Energy consumption efficiency
Usage	Heating type	Air supply and exhaust system or control method	
For hot water supply	Instantaneous type		86.0
	Storage type with rapid heating system		87.0
	Storage type other than rapid heating system		85.0
For heaters	Instantaneous type	Non-vented type	85.3
		Vented type	79.4
		Direct vent type	82.1
	Storage type with rapid heating system	On/off control	87.0
		Other than on/off control	82.0
	Storage type other than rapid heating system		84.0
For baths	Water heaters with a center flue heat exchanger		75.0
	Water heaters without a center flue heat exchanger		61.0

Note:

1. ***For hot water supply*** refers to those used primarily for hot water supply, and includes those equipped with functions for heating or to heat bath water.
2. ***For heating*** refers to those used primarily for heating, and includes those equipped with functions for hot water supply or to heat bath water.
3. ***For baths*** refers to those used primarily to heat bath water, and includes those equipped with functions for hot water supply or for heating.
4. ***Rapid heating system*** refers to heating period of 200 seconds or less (measured in accordance with the measurement method for heating period as determined by JIS S3031) .
5. ***Center flue heat exchanger*** refers to the duct that penetrates the hot water tank.
6. ***On/off control*** refers to systems that are controlled only by ignition and extinguishing.
7. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," in Ministry of Economy, Trade and Industry notification No. 58 (March 29, 2006), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of oil water heaters meeting the criteria to the total number of oil water heaters to be purchased (including lease/rental agreements) in the fiscal year.

11-4 Gas Cooking Appliances

(1) Items and Evaluation Criteria

Gas cooking appliances	**Evaluation Criteria** (1) Energy consumption efficiency for burner component shall not fall below the criteria listed in Table 1 for each category. (2) Energy consumption efficiency for the grill component shall not exceed the standard energy consumption efficiency calculated by using the formula listed in Table 2 for each category. (3) Energy consumption efficiency for the oven component shall not exceed the standard of energy consumption efficiency calculated by using the formula listed in Table 3 for each category. **Factors for Consideration** (1)The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item is made of as large amount of recycled plastic as possible if plastic components are used. (3)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4)A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Items that meet any of the criteria below will not be considered as ***Gas cooking appliances*** under consideration in the evaluation criteria of this section:
   (1) Items that were designed for commercial use.
   (2) Items that use gas (excluding city gas categorized under group 13A and liquefied petroleum gas) as its fuel source.
   (3) Gas grills.
   (4) Gas cooking tables.
   (5) Gas rice cookers.
   (6) Portable cooking stoves.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product).

Table1: Standard Energy Consumption Efficiency for Burner Component of Gas Cooking Appliances

Category			Standard Energy Consumption Efficiency for Burner Component
Type of gas cooking appliance	Installation type	Number of burners	
Gas burners	Tabletop type		51.0
	Built-in type		48.5
Gas burners with grill	Tabletop type	2 or less	56.3
		3 or more	52.4
	Built-in type	2 or less	53.0
		3 or more	55.6
	Cabinet or stationary type		49.7
Gas range			48.4

Note:

1. ***Gas range*** refers to a combination of oven and burner.
2. ***Tabletop type*** refers to an item that is to be placed on a table or a base for use.
3. ***Built-in type*** refers to an item that is to be built into a wall or a base.
4. ***Cabinet type*** refers to an item that is to be installed into its own cabinet.
5. ***Stationary type*** refers to an item that is to be installed on a base or a floor surface.
6. Energy consumption efficiency for burner component is calculated according to "3 Energy Consumption Efficiency Measurement Methods (1)," in Ministry of Economy, Trade and Industry notification No. 56 (March 2006), based on the Law Concerning the Rational Use of Energy.

Table2: Standard Energy Consumption Efficiency for Grill Component of Gas Cooking Appliances

Category		Calculation Formula of Standard Energy Consumption Efficiency for Grill Component
Combustion type	Cooking method	
Single sided	With water	E=25.1Vg+123
	Without water	E=25.1Vg+16.4
Double sided	With water	E=12.5Vg+172
	Without water	E=12.5Vg+101

Note:

1. E and Vg express the following numeric values.
   E : Glill section standard energy consumption efficiency (unit:Wh)
   Vg:Internal volume (unit:liter)
2. ***Single sided*** refers to a method where food is heated from one side.
3. ***Double sided*** refers to a method where food is heated from both sides.
4. ***With water*** refers to a method where cooking is performed with the grill pan filled with water.
5. ***Without water*** refers to a method where cooking is performed with the grill pan not filled with water.

6. ***Internal volume*** is obtained by the formula: grill area x height from the bottom of the grill plate to the top of the inlet (round to one decimal place).
7. Energy consumption efficiency for grill component is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry notification No.56 (March 2006), based on the Law Concerning the Rational Use of Energy.

Table3: Standard Energy Consumption Efficiency for Oven Component of Gas Cooking Appliances (includes Gas Ovens)

Oven type	Calculation formula of standard energy consumption efficiency for oven component
Tabletop or Stationary Type	E=18.6Vo+306
Built in Type	E=18.6Vo+83.3

Note:

1. E and Vo express the following numeric values.
   E: Oven section standard energy consumption efficiency (unit:Wh)
   Vo:Internal volume(unit:liter)
2. ***Tabletop type*** refers to an item that is to be placed on a table or a base for use.
3. ***Built-in type*** refers to an item that is to be built into a wall or a base.
4. ***Stationary type*** refers to an item that is to be installed on a base or a floor surface.
5. ***Internal volume*** is obtained by the formula: grill area x height from the bottom of the grill plate to the top of the inlet (rounded to one decimal place) .
6. Energy consumption efficiency for oven component is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry notification No.56 (March 2006), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of gas cooking appliances meeting the criteria to the total number of gas cooking appliances to be purchased (including lease/rental agreements) in the fiscal year.

12. Lighting

12-1. Lighting Equipment

(1) Items and Evaluation Criteria

Fluorescent lighting equipment	**Evaluation Criteria** (1) Equipment must meet one of the following criteria. a. As for service use lamp and desk lamp, energy consumption efficiency rate shall not fall below the standard energy consumption efficiency of applicable category in Table 1. b. As for residential use lamp, energy consumption efficiency rate shall not fall below the energy consumption from Table, multiplied by 127/100, calculated to two decimal places and then rounded off to one decimal place. (2) Contents of specified chemical substances does not exceed standard content ratio. Content ratio information of applicable chemical material is easily available on websites, etc. **Factors for Consideration** (1) The function with high effect of energy conservation such as the initial illuminance correction control, passive sensor control, and the brightness sensor control should be appended. (2) The item should be designed so that it can be easily dismantled and its materials separated to facilitate recycling. (3) Organic solvent, or paint with as low odor as possible is used as coating. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.
LED lighting equipment	**Evaluation Criteria** (1) Intrinsic energy consumption efficiency meet the standard of the applicable category in Table 2. (2) Average color rendering index Ra of products are 80 or more. Exceptionally, average color rendering index Ra of downlights and celling luminaries is 70 or more. (3) LED module rated lifespan is 40,000 hours or longer. (4) Contents of specified chemical substances does not exceed standard content ratio. Content ratio information of applicable chemical material is easily available on websites, etc. **Factors for Consideration** (1) The function with high effect of energy conservation such as the initial illuminance correction control, passive sensor control, and the brightness sensor control should be appended. (2) The item should be designed so that it can be easily dismantled

	and its materials separated to facilitate recycling. (3) Organic solvent, or paint with as low odor as possible is used as coating. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.
Illuminated signage using LED as the light source	**Evaluation Criteria** (1) Rated lifespan is 30,000 hours or longer. (2) Contents of specified chemical substances does not exceed standard content ratio. Content ratio information of applicable chemical material is easily available on websites, etc. **Factors for Consideration** (1) The item should be designed so that it can be easily dismantled and its materials separated to facilitate recycling. (2) Organic solvent, or paint with as low odor as possible is used as coating. (3) Plastic parts, when used, must be comprised as much as possible of recycled plastic. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. Equipments that meet any of the following criteria will not be considered as ***fluorescent lighting equipment*** under consideration in the evaluation criteria.
    a. Ones of explosion-proof type.
    b. Ones of heat-resistant type.
    c. Ones of dust-proof type.
    d. Ones of anticorrosion type.
    e. Ones designed for vehicles and other means of transport.
    f. Ones of wall-hung type, pendant type for service facilities or built-in type using fluorescent lamps of less than 40 watts.
    g. Ones designed for use in or on mining or manufacturing machinery.
    h. Ones designed for use in or on furniture.
    i. Ones whose bayonet base and fluorescent lamp stabilizer are structurally integrated (ones using a compact fluorescent lamp or lamps with built-in stabilizer)
    j. Ones whose globe for fluorescent lamp protection is transparent.
2. Desk lamp using compact fluorescent lamp equipped with internal stabilize that corresponds to G23 socket can be considered as specified procurement goods which meet Evaluation Criteria (2) of Fluorescent lighting equipment.
3. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound,

polybrominated biphenyl and polybrominated diphenyl ether.

4. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS. Handling of other accessories is to be determined in accordance with JIS C 0950:2008.
5. ***LED lighting equipment*** in this section refers to lighting equipment that uses white illuminating LED, hanging type, direct-mount type, built-in type, wall putting type and desk lamp. However, LED lighting equipment to attach LED lamps that have a structure of feeding power to the LED lamp through the cap, among LED lighting equipment that can install the LED lamp that used with traditional fluorescent lamps that have the same shape cap are excluded for the meanwhile.
6. ***Intrinsic energy consumption efficiency of LED lighting equipment*** in LED lighting equipment in this section refers to the amount obtained by dividing luminous flux emitted by the equipment by rated energy efficiency (In the case where it is necessary to install an independent power source externally to the equipment, rated energy efficiency of the power source will be used in the calculation.). In addition, intrinsic energy consumption efficiency of equipments with a function to regulate amount of light and color temperature is assumed to be the ratio calculated from the total luminous flux at the maximum power consumption.
7. Measuring method of ***Average color rendering index Ra*** is in accordance with light source color and color rendition evaluation method of source of light by JIS C 7801(Measuring methods of lamps for general lighting) and JIS C 8152-2 (Photometry of white light emitting diode (LED) for general lighting-Part 2: LED modules and LED light engines).
8. ***Downlight*** in this section of LED lighting equipment denote the one specified in JIS Z 8113:1998 ” Lighting vocabulary”.
9. ***Ceiling luminaire*** in this section of LED lighting equipment denote the one with 12,000lm or more of luminous fluxs specified in JIS Z 8113:1998 ” Lighting vocabulary”.
10. ***LED module rated lifespan*** of LED lighting equipment in this section refers to the amount of time it takes for the initial luminous flux to decrease by 70%. Measuring method is in accordance with JIS C 8152-3 (Photometry of white light emitting diode (LED) for general lighting-Part 3: measurement methods for lumen maintenance).
11. Measuring method of the total luminous flux for LED lighting equipment is in accordance with JIS C 8105-5:2011, ***The Illuminator 5th: Method of Measuring Light Distribution***.
12. ***Illuminated signage using LED as the light source*** in this section refers to panels and signs whose letters, etc. are illuminated by an internal LED light. The light source, including heat radiation, must be protected.
13. ***Rated lifespan*** of Illuminated signage using LED as the light source in this section refers to the amount of time it takes for the initial luminous flux to decrease by 50%.

14. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
15. Each procurement organization must make compare and examine to select the one that safety and quality control will be performed enough.
16. In order to achieve an adequate management of chemical substances, each procurement organization will manage and preserve content information of specified chemical substances that had been confirmed upon acquisition of the product.

Table 1: Standard Energy Consumption Efficiency of Fluorescent Lighting Equipment

Category			Standard energy consumption efficiency
Intended use	Lamp shape	Lamp size	
For service use	Straight tube type or twin tube compact type	Using fluorescent lamp of 86 or above in size category	100.8
		Using fluorescent lamp of less than 86 in size category	100.5
	Compact type of non-twin tube shape		61.6
For residential use	Circular type or Straight tube type	Using fluorescent lamp of 70 or above in total of size category counts (except ones using straight tube type fluorescent lamps of 20 in size category)	91.6
		Using fluorescent lamp of less than 70 in total of size category counts. Using fluorescent lamp of 70 or above in total of size category counts and using straight tube type fluorescent lamp which size is 20.	78.1
For desk lamp	Straight tube type or compact type		70.8

Note:

1. ***Fluorescent lamp size category*** refers to, among straight tube type fluorescent lamps, the rated lamp power prescribed under 2.3.1 of JIS C 7617-2(Double-capped fluorescent lamps-Part 2: Performance specifications) for dedicated high frequency lighting type fluorescent lamps or to the size category prescribed under 2.3.1 of JIS C 7617-2 for any other straight tube type fluorescent lamps, to the rated lamp power prescribed under 2.3.1 of JIS C7618-2 for compact type fluorescent lamps or circular dedicated high frequency lighting type fluorescent lamps, or to the rated lamp power or size category prescribed under 2.3.1 of JIS C7618-2 for any other circular

fluorescent lamps than circular dedicated high frequency lighting type fluorescent lamps. For any fluorescent lamps to which none of these prescriptions applies, the size category refers to the rated lamp power. However, for ones of high output lighting type among circular dedicated high frequency lighting type fluorescent lamps, the size category refers to the value of lamp power at the time of high output lighting.

2. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," in Ministry of International Trade and Industry notification No.54 (March 19, 2010), based on the Law Concerning the Rational Use of Energy.

Table 2: Standard of Intrinsic Energy Consumption Efficiency of LED Lighting Equipment

Light source color	Intrinsic energy consumption efficiency
Daylight	110lm/W or more
Daylight white	
White	
Warm white	75lm/W or more
Usual electric bulb color	

Note:

1. ***Light source color*** is in accordance with the category of the light source color by JIS Z 9112(Classification of fluorescent lamps and light emitting diodes by chromaticity and colour rendering property).
2. Equipments emitting any color of other than daylight, daylight white, white, warm white and usual electric bulb color will not be considered as ***LED lighting equipment*** under consideration in the evaluation criteria in this section.
3. As for downlighs emitting color of daylight, daylight white, white, of mount hole size for equipment are 300mm or smaller, standard of Intrinsic energy consumption efficiency shall be 85 lm/W or more.
4. As for celling luminaire emitting color of daylight, daylight white, white, standard of Intrinsic energy consumption efficiency shall be 100 lm/W or more.

(2) Target Setting Guideline

Ratio of the number of products meeting the criteria to the total number of products to be purchased in the fiscal year.

12-2. Lamps

(1) Items and Evaluation Criteria

Fluorescent lamps (tube type 40 fluorescent lamps)	**Evaluation Criteria** Product meets one of the following criteria. (1) High-frequency lighting (Hf) lamps meet the following criteria. a. Lamp efficiency is no less than 100lm/W. b. Average color rendering index Ra of 80 or more. c. Tube diameter of no more than 25.5(± 1.2) mm. d. No more than average of 5 mg encapsulated mercury per product. e. Rated life of at least 10,000 hours. (2) Rapid-start fluorescent lamps or fluorescent lamps with starter, meet the following criteria. a. Lamp efficiency is no less than 851m/W. b. Average color rendering index Ra of 80 or more. c. Tube diameter of no more than 32.5 (± 1.5) mm. d. No more than average of 5 mg encapsulated mercury per product. e. Rated life is at least 10,000 hours. **Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Light bulb-shaped lamps	**Evaluation Criteria** Meet one of the following criteria. (1) Bulb-shaped LED lamps must meet the following criteria. a. Lamp efficiency meet the standard for the applicable category of light source color in Table 1. However, for reflective lamps whose divergence is less than 90 degrees, the lamp efficiency is no less than 50lm/W. b. Average color rendering index Ra of 70 or more. c. Rated life is at least 40,000 hours. However, for reflective lamps whose divergence is less than 90 degrees, rated life shall be at least 30,000 hours. (2) Self-ballasted fluorescent lamps must meet the following criteria. a. Energy consumption efficiency is not lower than the standard energy consumption efficiency of applicable category in Table 2. b. No more than average 4 mg encapsulated mercury per product. c. Rated life is at least 6,000 hours (3) Other than noted above (1) or (2), must meet the following criteria.

	a. Lamp efficiency is no less than 501m/W. b. Rated life of at least 6,000 hours. **Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Bulb-shaped LED lamps*** and ***Self-ballasted fluorescent lamps*** under consideration in the evaluation criteria in this section must fit directly into a incandescent socket. However, it will not apply for lamps equipped with such as passive sensor and emergency lighting (direct current circuit).
2. Measuring methods of ***Average color rendering index Ra*** is in accordance with light source color and color rendition evaluation method of source of light by JIS C 7801 (Measuring methods of lamps for general lighting).
3. ***Light source color*** is in accordance with the category of the light source color by JIS Z 9112(Classification of fluorescent lamps and light emitting diodes by chromaticity and color rendering property).
4. Equipments emitting any color of other than daylight, daylight white, white, warm white and usual electric bulb color will not be considered as ***Fluorescent lamps and Light bulb-shaped lamps*** under consideration in the evaluation criteria in this section.
5. ***Bulb-shaped LED lamps*** in this section denotes white LED light bulb-shaped lamps used for general lighting purpose.
6. ***Rated life*** of bulb-shaped LED lamps in this section refers to the total amount of lighting time until the initial luminous flux to decrease by 70%. The method of measurements is in accordance with JIS C 8152-3 (Photometry of white light emitting diode for general lighting-Part 3: measurement methods for lumen maintenance).
7. ***Rated life of*** Self-ballasted fluorescent lamps in this section refers to the short one either the total amount of lighting time until lamp will no longer start or the total amount of lighting time until the initial total luminous flux to decrease by 60%. The method of measurements is in accordance with JIS C 7620-2 (Self-ballasted fluorescent lamps for general lighting services-Part 2: Performance specifications).
8. When procuring lamp for emergency lighting equipment, each procurement organization must confirm the applicability of the equipment enough.

Table 1: Standard of Lamp Efficiency for Bulb-shaped LED Lamps

Light source color	Lamp efficiency
Daylight	80lm/W or more
Daylight white	
White	
White	70lm/W or more
Warm white	
Usual electric bulb color	

Note:

For the Bulb-shaped LED lamps regulate amount of light and light color temperature, the standard of the lamp efficiency is the value in which 5lm/W is subtracted from the applicable category of light source color in Table 1. The lamp efficiency of that is assumed to be the ratio calculated from the total luminous flux at the maximum power consumption.

Table 2: Standard Energy Consumption Efficiency of Self-ballasted Fluorescent Lamp

Category			Standard energy consumption efficiency
Fluorescent lamp size category	Light source color of Fluorescent lamp	Shape of fluorescent lamp	
10	Usual electric bulb color		60.6
	Daylight white		58.1
	Daylight		55.0
15	Usual electric bulb color		67.5
	Daylight white		65.0
	Daylight		60.8
25	Usual electric bulb color	Fluorescent lamp is exposed	72.4
		Fluorescent lamp is not exposed	69.1
	Daylight white	Fluorescent lamp is exposed	69.5
		Fluorescent lamp is not exposed	66.4
	Daylight	Fluorescent lamp is exposed	65.2
		Fluorescent lamp is not exposed	62.3

Note:

1. Equipments that meet any of the following criteria will not be considered as ***Self-ballasted fluorescent lamp*** under consideration in the evaluation criteria.
    a. Ones structured as to have a reflector.
    b. Ones having a function to regulate light.
    c. Ones designed for use in henhouse.
    d. Ones allowing separation of fluorescent lamp.

e. Ones whose globe for fluorescent lamp protection is transparent.

2. ***Fluorescent lamp size category*** refers to the category of size prescribed under JIS C 7620-2.
3. Energy consumption efficiency is calculated according to “3 Energy Consumption Efficiency Measurement Methods,” in Ministry of International Trade and Industry notification No.54 (March 19, 2010), based on the Law Concerning the Rational Use of Energy.

(2) Target Setting Guideline

Ratio of the number of each item meeting the criteria to the total number of items to be purchased in the fiscal year.

13. Vehicles, etc.

13-1. Vehicles

(1) Items and Evaluation Criteria

Vehicles	**Evaluation criteria** Vehicles generate significantly less environmental impact compared to average vehicles by using new technologies, etc. and fall into one of the following categories. (1) Electric vehicles (2) Natural gas vehicles (3) Hybrid vehicles (4) Plug-in hybrid vehicles (5) Fuel cell vehicles (6) Hydrogen vehicles (7) Clean diesel vehicles (limited to with a riding capacity of 10 persons or less (hereinafter referred to as ***Passenger vehicles***)). The same applies below.) (8) Passenger vehicles and Small buses a. Gasoline vehicles Passenger vehicles meet the emission standards listed in Table 1 and shall meet the standard fuel efficiency of the applicable category in Table 2-1. Passenger vehicles with a riding capacity of 11 persons or more with a gross vehicle weight of 3.5 tons or less (hereinafter referred to as ***Small buses***) shall meet the emission standards listed in Table 1 and shall meet the standard fuel efficiency of the applicable category in Table 3. b. Diesel vehicles Small buses meet the standard fuel efficiency of the applicable category in Table 3. (9) Small freight vehicles a. Gasoline vehicles Freight vehicles with a gross vehicle weight of 3.5 tons or less (hereinafter referred to as ***Small freight vehicles***) meet the emission standards listed in Table 1 and meet the standard fuel efficiency of the applicable category in Table 4-1. b. Diesel vehicles Small freight vehicles meet the standard fuel efficiency of the applicable category in Table 5. (10) Heavy vehicles a. Passenger vehicles with a riding capacity of 11 persons or more with a gross vehicle weight of 3.5 tons or more meet the standard fuel efficiency of the applicable category in Table 6. b. Freight vehicles with a gross vehicle weight of 3.5 tons or more (excluding traction engine. Hereinafter referred

	to as ***Trucks.***) meet the standard fuel efficiency of the applicable category in Table 7. c. Freight vehicles with a gross weight of 3.5 tons or more (limited to traction engine. Hereinafter referred to as ***Tractors.***) meet the standard fuel efficiency of the applicable category in Table 8. (11) LP gas vehicles a. Passenger vehicles shall meet the emission standards listed in Table 1 and meet the standard fuel efficiency of the applicable category in Table 9. b. Small freight vehicles (limited to with a gross weight of 2.5 tons or less) meet the emission standards listed in Table 1 and shall meet the standard fuel efficiency of the applicable category in Table 10. **Factors for Consideration** (1) Global warming potential of the material used for air conditioner is 150 or small. (2) The amounts of lead are reduced as much as possible (excluding those used in battery). (3) The item is designed for long-term use, taking into account conservation of resources so that reuse of its materials is facilitated after its useful life, based on the evaluation criteria of the Law to Promote Effective Use of Resources. Especially, if the components include rare metals, reusing them should be taken into consideration when designing the products. (4) The item uses recycled material as much as possible. (5) The item is designed and manufactured as an idling stop-and-start car. (6) The eco-drive support function is installed.

Note:

1. ***Vehicles*** under consideration in the evaluation criteria of this section include passenger cars, small-size cars, and mini-sized cars (excluding motorcycles), Article 2 of Road Transportation Vehicle Law Enforcement Rule (No.74 of Transportation Ministerial Ordinance on August 16, 1951).
2. For Hybrid vehicles and Clean diesel vehicles, if it shall not meet the standards of fuel efficiency for their classification in each tables corresponding to the fuel kind and the model of vehicles, it does not assumed to meet the evaluation criteria in this section.
3. ***Gross vehicle weight*** denotes the total vehicle weight in accordance with Article 40 of Road Transportation Vehicle Law Enforcement Rule. The same applies below.
4. Factors for consideration (1) apply to the designated products defined as the Fluorocarbons prescribed in Article 2, Paragraph 2 of the Act for Rationalized Use and Proper Management of Fluorocarbons (Act No. 64 of 2001)
5. ***Global warming potential*** in this section denotes the numerical value that showed degree to which is heat-trapping gas brings global warming in ratio to which carbon dioxide brings global warming.
6. ***Rare metals*** refers to the 31 types of metals (the seventeen rare earth elements are

considered as one metal type) specified at the Special Meeting for the Comprehensive Assessment of Rare Metals at the Mining Panel of the Ministry of Economy, Trade and Industry.

7. ***The eco-drive support function*** is such as support functions to those who drive about the best accelerator operation, shift change, display of eco-drive execution condition, functions of analysis or diagnosis and select function of energy conservation route that synchronizes with car navigation system.
8. It is necessary to proactively utilize bioethanol-blend gasoline (E3, E10 and ETBE) for common official vehicles (passenger vehicles for ordinary official use (limited to with a riding capacity of no more than 10 persons) among standard vehicles and small vehicles. The same applies below.)in the region where the supply system have already organized.

Table 1 : Emission Standards for Gasoline Vehicles and LP gas Vehicles

Category	Nitrogen oxide	Non-methane hydrocarbon	Carbon monoxide
Passenger vehicles	1.15g/km or less	0.013g/km or less	0.013g/km or less
Small buses(1.7tons or less) Light-duty freight vehicles	1.15g/km or less	0.025g/km or less	0.025g/km or less
Small buses(1.7tons or more) Medium-duty freight vehicles	2.55g/km or less	0.025g/km or less	0.035g/km or less
Mini-size freight vehicles	4.02g/km or less	0.025g/km or less	0.025g/km or less

Note:

1. Particle-state matter should be extent considered that there is no exhaust.
2. ***Light-duty freight vehicles*** refers to freight vehicles with a gross vehicle weight of 1.7tons or less. The same applies below.
3. ***Medium-duty freight vehicles*** refers to freight vehicles with a gross vehicle weight of 1.7tons or more and 3.5 tons or less. The same applies below.
4. ***Mini-size freight vehicles*** refers to mini cars among freight vehicles. The same applies below.

Table 2 : Standard Fuel Efficiency in JC08 Mode for Gasoline Passenger Vehicles and Diesel Passenger Vehicles

Category	Standard fuel efficiency (minimum)	
	Gasoline	Diesel
Vehicle weight of less than 601kg	22.5km/L	24.8km/L
Vehicle weight of 601 kg or more, but less than 741kg	21.8km/L	24.0km/L
Vehicle weight of 741 kg or more, but less than 856kg	21.0km/L	23.1km/L
Vehicle weight of 856kg or more, but less than 971kg	20.8km/L	22.9km/L

Vehicle weight of 971 kg or more, but less than 1,081kg	20.5km/L	22.6km/L
Vehicle weight of 1,081 kg or more, but less than 1,196kg	18.7km/L	20.6km/L
Vehicle weight of 1,196 kg or more, but less than 1,311kg	17.2km/L	18.9km/L
Vehicle weight of 1,311 kg or more, but less than 1,421kg	15.8km/L	17.4km/L
Vehicle weight of 1,421 kg or more, but less than 1,531kg	14.4km/L	15.8km/L
Vehicle weight of 1,531 kg or more, but less than 1,651kg	13.2km/L	14.5km/L
Vehicle weight of 1,651kg or more, but less than 1,761kg	12.2km/L	13.4km/L
Vehicle weight of 1,761 kg or more, but less than 1,871kg	11.1km/L	12.2km/L
Vehicle weight of 1,871 kg or more, but less than 1,991kg	10.2km/L	11.2km/L
Vehicle weight of 1,991kg or more, but less than 2,101kg	9.4km/L	10.3km/L
Vehicle weight of 2,101 kg or more, but less than 2,271kg	8.7km/L	9.6km/L
Vehicle weight of 2,271kg or more	7.4km/L	8.1km/L

Note:

Vehicle weight refers to the weight of a vehicle when empty as specified in Item 6, Article 1 of the safety standards for road trucking vehicles (No.67 statute of the Transport Ministry enacted in 1951). The same applies below.

Table 3 : Standard Fuel Efficiency in JC08 Mode for Small Buses (with a gross vehicle weight of 3.5 tons or less)

Category	Standard fuel efficiency (minimum)
Small buses fueled with gasoline	8.5km/L
Small buses fueled with diesel oil	9.7km/L

Table 4 : Standard Fuel Efficiency in JC08 Mode for Gasoline Small Freight Vehicles

Category				Standard fuel efficiency (minimum)
Type of motor vehicle	Type of transmission	Vehicle weight	Structure of motor vehicle	
Mini-size freight vehicles	Manual	Less than 741kg	A	23.2km/L
		741kg or more		20.3km/L
	Other than	Less than 741kg		20.9km/L

	manual	741kg or more, but less than 856kg		19.6km/L
		856kg or more		18.9km/L
	Manual	Less than 741kg	B	18.2km/L
		741kg or more, but less than 856kg		18.0km/L
		856kg or more, but less than 971kg		17.2km/L
		971kg or more		16.4km/L
	Other than manual	Less than 741kg		16.4km/L
		741kg or more, but less than 856kg		16.0km/L
		856kg or more, but less than 971kg		15.4km/L
		971kg or more		14.7km/L
Light-duty freight vehicles	Manual	Less than 1,081kg		18.5km/L
		1,081kg or more		17.1km/L
	Other than manual	Less than 1,081kg		17.4km/L
		1,081kg or more, but less than1,196kg		15.8km/L
		1,196kg or more		14.7km/L
Medium-duty freight vehicles	Manual		A	14.2km/L
	Other than manual	Less than 1,311kg		13.3km/L
		1,311kg or more		12.7km/L
	Manual	Less than 1,311kg	B1	11.9km/L
			B2	11.2km/L
		1,311kg or more, but less than1,421kg	B1	10.6km/L
			B2	10.2km/L
		1,421kg or more, but less than1,531kg	B1	10.3km/L
			B2	9.9km/L
		1,531kg or more, but less than1,651kg	B1	10.0km/L
			B2	9.7km/L
		1,651kg or more, but less than1,761kg	B1	9.8km/L
			B2	9.3km/L
		1,761kg or more	B1	9.7km/L
			B2	8.9km/L
	Other than manual	Less than 1,311kg	B1	10.9km/L
			B2	10.5km/L
		1,311kg or more, but less than1,421kg	B1	9.8km/L
			B2	9.7km/L
		1,421kg or more, but less than1,531kg	B1	9.6km/L
			B2	8.9km/L
		1,531kg or more, but less	B1	9.4km/L

		than1,651kg	B2	8.6km/L
		1,651kg or more	B2	7.9km/L
		1,651kg or more, but less than1,761kg	B1	9.1km/L
		1,761kg or more, but less than1,871kg		8.8km/L
		1,871kg or more		8.5km/L

Note:

1. The term ***Structure A*** in this table refers to structures that meet to all of the criteria listed below. The same applies below.
   a. The value obtained by dividing maximum authorized freight mass by gross vehicle weight is 0.3 or less.
   b. The passenger seating section and the cargo carrying section are installed in the same vehicle compartment, and the said compartment and the exterior are separated by a fixed roof and dividing walls such as window glass, etc.
   c. The engine is located in front of the driver's compartment.
2. The term ***Structure B*** in this table refers to all structures other than Structure A. The same applies below.
3. The term ***Structure B1*** in this table refers to all structures that fulfill the requirements set forth in 1b. The same applies below.
4. The term ***Structure B2*** in this table refers to all structures other than B1. The same applies below.

Table5: Standard Fuel Efficiency in JC08 Mode for Diesel Small Freight Vehicles

Category				Standard fuel efficiency (minimum)
Type of motor vehicle	Type of transmission	Vehicle weight	Structure of motor vehicle	
Mini-size freight vehicle	Manual	Less than 741kg	A	25.5 km/l
		741kg or more		22.3 km/l
	Other than manual	Less than 741 kg		23.0 km/l
		741 kg or more, but less than 856 kg		21.6 km/l
		856 kg or more		20.8 km/l
	Manual	Less than 741 kg	B	20.0 km/l
		741 kg or more, but less than 856 kg		19.8 km/l
		856 kg or more, but less than 971 kg		18.9 km/l
		971 kg or more		18.0 km/l
	Other than manual	Less than 741 kg		18.0 km/l
		741 kg or more, but less than 856 kg		17.6 km/l

		856 kg or more, but less than 971 kg		16.9 km/l
		971 kg or more		16.2 km/l
Light-duty freight vehicles	Manual	Less than 1,081kg		20.4 km/l
		1,081kg or more		18.8 km/l
	Other than manual	Less than 1,081 kg		19.1 km/l
		1,081 kg or more, but less than 1,196 kg		17.4 km/l
		1,196 kg or more		16.2 km/l
Medium-duty freight vehicles	Manual	Less than 1,421 kg	A or B1	14.5 km/l
			B2	14.3 km/l
		1,421 kg or more, but less than 1,531 kg	A or B1	14.1 km/l
			B2	12.9 km/l
		1,531 kg or more, but less than 1,651 kg	A or B1	13.8 km/l
			B2	12.6 km/l
		1,651 kg or more, but less than 1,761 kg	A or B1	13.6 km/l
			B2	12.4 km/l
		1,761 kg or more, but less than 1,871 kg	A or B1	13.3 km/l
			B2	12.0 km/l
		1,871 kg or more, but less than 1,991 kg	A or B1	12.8 km/l
			B2	11.3 km/l
		1,991 kg or more, but less than 2,101 kg	A or B1	12.3 km/l
			B2	11.2 km/l
		2,101 kg or more	A or B1	11.7 km/l
			B2	11.1 km/l
	Other than manual	Less than 1,421 kg	A or B1	13.1 km/l
			B2	12.5 km/l
		1,421 kg or more, but less than 1,531 kg	A or B1	12.8 km/l
			B2	11.8 km/l
		1,531 kg or more, but less than 1,651 kg	A or B1	11.5 km/l
			B2	10.9 km/l
		1,651 kg or more, but less than 1,761 kg	A or B1	11.3 km/l
			B2	10.6 km/l
		1,761 kg or more, but less than 1,871 kg	A or B1	11.0 km/l
			B2	9.7 km/l
		1,871 kg or more, but less than 1,991 kg	A or B1	10.8 km/l
			B2	9.5 km/l
		1,991 kg or more, but less than 2,101 kg	A or B1	10.3 km/l
			B2	9.0 km/l
		2,101 kg or more	A or B1	9.4 km/l
			B2	8.8 km/l

Table 6 : Standard Fuel Efficiency in Heavy Vehicle Mode for Route Buses and General Buses (with a gross vehicle weight of 3.5 tons or more)

Category	Standard fuel efficiency (minimum)	
	Route buses	General buses
Gross vehicle weight of 3.5 tons or more, but less than 6 tons	6.97km/L	9.04km/L
Gross vehicle weight of 6 tons or more, but less than 8 tons		6.52km/L
Gross vehicle weight of 8 tons or more, but less than 10 tons	6.30km/L	6.37km/L
Gross vehicle weight of 10 tons or more, but less than 12 tons	5.77km/L	5.70km/L
Gross vehicle weight of 12 tons or more, but less than 14 tons	5.14km/L	5.21km/L
Gross vehicle weight of 14 tons or more, but less than 16 tons	4.23km/L	4.06km/L
Gross vehicle weight of 16 tons		3.57km/L

Note:

1. ***Route buses*** refer to the vehicles for public service vehicle transportation business that decides routes other than route such as national expressway and operates regularly, with a gross vehicle weight of 3.5tons or more and with a riding capacity of 11 persons or more.
2. ***General buses*** refer to other than route buses, with a gross vehicle weight of 3.5tons or more and with a riding capacity of 11 persons or more.

Table 7: Standard Fuel Efficiency in Heavy Vehicle Mode for Tracks (with a gross vehicle weight of 3.5tons or more)

Category	Maximum authorized freight mass	Standard fuel efficiency (minimum)
Gross vehicle weight of 3.5 tons or more, but less than 7.5tons	1.5tons or less	10.83km/L
	1.5tons or more, but less than 2tons	10.35km/L
	2tons or more, but less than 3tons	9.51km/L
	3tons or more	8.12km/L
Gross vehicle weight of 7.5 tons or more, but less than 8 tons		7.24km/L
Gross vehicle weight of 8 tons or more, but less than 10 tons		6.52km/L
Gross vehicle weight of 10 tons or more, but less than 12 tons		6.00km/L
Gross vehicle weight of 12 tons or more, but less than 14 tons		5.69km/L
Gross vehicle weight of 14 tons or more, but		4.97km/L

less than 16 tons		
Gross vehicle weight 16 tons or more but less than 20 tons		4.15 km/L
Gross vehicle weight 20 tons		4.04 km/L

Table 8 : Standard Fuel Efficiency in Heavy Vehicle Mode for Tractors(traction engine with a gross vehicle weight of 3.5tons or more)

Category	Standard fuel efficiency (minimum)
Gross vehicle weight of no more than 20 tons	3.09 km/l
Gross vehicle weight 20 tons or more	2.01 km/l

Table 9 : Standard Fuel Efficiency in 10-15 Mode for LP Gas-fueled Passenger Cars

Category	Standard fuel efficiency (minimum)
Vehicle weight of less than 703 kg	15.9 km/l
Vehicle weight of 703 kg or more, but less than 828 kg	14.1 km/l
Vehicle weight of 828 kg or more, but less than 1,016 kg	13.5 km/l
Vehicle weight of 1,016 kg or more, but less than 1,266 kg	12.0 km/l
Vehicle weight of 1,266 kg or more, but less than 1,516 kg	9.8 km/l
Vehicle weight of 1,516 kg or more, but less than 1,766 kg	7.9 km/l
Vehicle weight of 1,766 kg or more, but less than 2,016 kg	6.7 km/l
Vehicle weight of 2,016 kg or more, but less than 2,266 kg	5.9 km/l
Vehicle weight of 2,266 kg or more	4.8 km/l

Table 10 : Standard Fuel Efficiency in 10-15 Mode for LP Gas Small Freight Vehicles

Category				Standard fuel efficiency (minimum)
Type of motor vehicle	Type of transmission	Vehicle weight	Structure of motor vehicle	
Mini-size freight vehicles	Manual	Less than 703 kg	A	15.8 km/l
			B	13.3 km/l
		703 kg or more, but less than 828 kg	A	14.1 km/l
			B	13.1 km/l
		828 kg or more		12.1 km/l
	Other than	Less than 703 kg	A	14.8 km/l

	manual		B	12.7 km/l
		703 kg or more, but less than 828 kg	A	12.9 km/l
			B	12.1 km/l
		828 kg or more		11.7 km/l
Light-duty freight vehicles	Manual	Less than 1,016 kg		13.9 km/l
		1,016 kg or more		12.3 km/l
	Other than manual	Less than 1,016 kg		11.7 km/l
		1,016 kg or more		10.8 km/l
Medium-duty freight vehicles (limited to gross vehicle weight of 2.5tons or less)	Manual	Less than 1,266 kg	A	11.3 km/l
			B	9.6 km/l
		1,266 kg or more, but less than 1,516 kg		8.4 km/l
		1,516 kg or more		7.3 km/l
	Other than manual	Less than 1,266 kg	A	9.8 km/l
			B	8.8 km/l
		1,266 kg or more		8.1 km/l

(2) Target Setting Guideline

Total number of vehicles to purchase (including lease/rental agreements) in the fiscal year concerned.

However, the target shall be set each common official vehicles and other than common official vehicles.

13-2. ITS Adaptable Car Accessories

(1) Items and Evaluation Criteria

ETC adaptable car accessories	**Evaluation Criteria** When installed in vehicles, equipment may be used with non-stop automated toll payment system (ETC) and receive information on traffic conditions and toll through radio via antennas installed in toll booths.
Car navigation systems	**Evaluation Criteria** The system is equipped with a function that allows the following information to be communicated to the driver that is operating the vehicle, either through a screen mounted on the vehicle or by voice. (1) The current position and direction of the vehicle in operation. (2) The current information regarding traffic condition of surrounding roads.

(2)Target Setting Guideline

Number of equipment to be purchased in the fiscal year.

13-3. Tires

(1) Items and Evaluation Criteria

Tires for passenger cars	**Evaluation Criteria** (1) Rolling resistance coefficient is 9 or less. (2) Product is not a spiked tire. **Factors for Consideration** (1) Increased life of product is considered. (2) Noise reduction during operation is considered. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (4) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Tires for passenger cars*** under consideration for evaluation criteria in this section refers to those sold on the market (excluding stud-less tires), and does not regulate tires that the car is equipped with at the time of purchase.
2. Testing method of the rolling resistance coefficient is based on JIS D 4234.
3. Item (1) in the Evaluation Criteria, wet grip performance must be 110 or more, measured by ***TEST METHOD FOR TYRE WET GRIP GRADING (C1 TYRES))***
4. Item (2) in the Evaluation Criteria takes in to consideration the aims of ***Regulations regarding the prevention of dust from spiked tires*** (Regulation No.55, 1990) whose aim is the prevention of dust from spiked tires in order to protect people's health and to preserve the living environment.

(2) Target Setting Guideline

Ratio of the number of tires for passenger cars meeting the criteria to the total number of tires to be purchased in the fiscal year.

13-4 Engine Oil

(1)Items and Evaluation Criteria

2 cycle engine oil	**Evaluation Criteria** (1) The rate of biodegradation within 28 days is 60% or more. (2) The 96 hour LC50 value for acute toxicity test using fish is 100 mg/l or more. **Factors for Consideration** (1)A system for collection and reuse/recycling of used oil container. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (3)A system for the collection and reuse/recycling of packaging, etc is considered.

Note:

1. Biodegradation testing should employ one of the following methods. 10-d window shall not be used for these testing methods.
   *OECD (Organization for Economic Co-Operation and Development) Chemical Substance Testing Guideline
   - 301B (CO2 Production Testing)
   - 301C (Modified MITI (I) Testing)
   - 301F (Manometric Respirometry Testing)

   *ASTM (American Society for Testing and Materials)
   - D5864 (Standard testing method to determine the degree of aerobic biodegradation in water environment for lubricants and lubricant components)
   - D6731 (Standard testing method to determine the degree of aerobic biodegradation in water environment for lubricant inside an airtight respirometer and lubricant components)
2. Acute toxicity testing using fish should employ one of the following methods.
   *JIS (Japan Industrial Standards)
   - K 0102 (Factory Drainage Testing Method)
   - K 0420-71 Series (10, 20, 30)

   (Water quality - Measurement of acute toxicity of chemical substance for fresh-water fish (zebra fish (cartilaginous, carps) – Part 1: Still water method; Part 2: Partially still water method; Part 3: Streaming method)

   *OECD (Organization for Economic Co-Operation and Development)
   - 203 (Acute toxicity test for fish)

   For testing of insoluble products, WAF (Water Accommodated Fraction) or WSF (Water Soluble Fraction) that have been prepared in accordance with ASTM D6081 (Standard Practice for Aquatic Toxicity Testing of Lubricants: Sample Preparation and Results Interpretation) may be used. The 96hour LL50 value need to be 100mg/l or higher for this purpose.

(2)Target Setting Guideline

Ratio per each category of the amount (liters) meeting the criteria to the total amount (liters) to be purchased in the fiscal year

14. Fire Extinguishers

(1)Items and Evaluation Criteria

Fire extinguishers	**Evaluation Criteria** (1) Fire protection fluid shall use no less than 40% by weight of recycled material. (2) A system is in place for collection and reuse/recycling of used materials, and a system for the proper disposal of components which cannot be reused or recycled. **Factors for Consideration** (1) The item is designed so that it can be easily dismantled and its materials separated to facilitate either reuse of components or recycling of materials. (2) The item uses as large amount of recycled plastic as possible if plastic components are used. (3) Organic solvent, or paint with as low odor as possible is used as coating. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.

Note:

1. ***Fire extinguisher*** under consideration in the evaluation criteria of this section denotes powder (ABC) fire extinguisher (powder fire extinguisher that is in accordance with "Ordinance to determine technical standards for fire extinguishers (Ministry of Home Affairs Ordinance 27, September 17, 1964)", applicable to all of A fire, B fire and Electric fire, and does not include aerosol type handy fire extinguishers, fire extinguishers for the ships and fire extinguishers for the aircraft.) and includes replacement fire protection fluid to be used during inspection.
2. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the store, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used fire extinguisher.
   b. Specific information for the collection of used mobile phones, etc. (collection method, collection location, etc.) are available for the users on the package, enclosed printed matter, user's manual, or the website.

   A system for reuse and recycling should fulfill the below requirements c. and d.

   c. The collected products must be reused, material recycled and chemical recycled.
   d. The parts that cannot be reuse or recycling of collected products must energy recovered.
3. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the

recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)

(2)Target Setting Guideline

Ratio of the number of fire extinguishers meeting the criteria to the total number of fire extinguishers to be purchased in the fiscal year.

15. Uniforms and Work Clothes

(1) Items and Evaluation Criteria

Uniforms and work clothes	**Evaluation Criteria** (1) Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. a. Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers used except lining. If polyester fibers are used less than 50% by weight of all fibers except lining, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers except lining. b. Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers used, and a system for collecting, reuse and recycling materials after product use is established. (2) Products whose fiber content (natural and chemical) includes synthetic fiber made from vegetable whose reductional effect of environmental load must fulfill one of the following. a. Products whose fiber content includes biodegradable synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used and also a system for collecting, reuse and recycling materials after product use is established. b. Products whose fiber content includes non biodegradable synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. c. Products whose fiber content includes non biodegradable synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 10% by weight of all fibers used and also a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fibers other than polyester from recycled PET resin, or synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed should use unused fiber or reconstructed fiber as much as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Caps	**Evaluation Criteria** Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers used. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2) Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers used, and a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1) A system is in place for the collection, reuse and recycling after product use. (2) Fibers other than polyester from recycled PET resin should use unused fiber or reconstructed fiber as much as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as button, fastener, hook and sewing thread, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) and synthetic fiber or plastics made from vegetable that is acknowledged for its environmental load reduction effects may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins or synthetic fiber made from vegetable that is acknowledged for its environmental load reduction effects".
3. ***Biodegradable*** denotes the performance of no less than 60% according to biodegradability examination (OECD 301C, JIS K 6950, JIS K 6951, JIS K 6953, and JIS K 6955, etc. The examination period depends for the period that each examination method provides.). ***Non biodegradable*** denotes the performance of no biodegradability.
4. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).
5. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
6. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for

voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.

b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

A system for reuse and recycling should fulfill the below requirements c. and d.

c. The collected products must be reused, material recycled and chemical recycled.

d. The parts that cannot be reuse or recycling of collected products must energy recovered.

7. ***Synthetic fiber whose reductional effect of environmental load has been confirmed*** denotes material whose reductional effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
8. When cleaning the products, each procurement organization should consider about the following:
   a. Choose the business who executes cleaning that fulfills the evaluation criteria of "Laundry and dry cleaning"(refer to ***Laundry and dry cleaning*** section).
   b. Acknowledge thoroughly the labeling based on JIS L 0217 (Labeling symbols and instructions for handling of fiber products).

(2) Target Setting Guideline

1. Uniforms and work clothes: ratio of the number of uniforms and work clothes that meets the criteria to the total number of those containing polyester fiber or vegetable based synthetic fiber to be purchased in the fiscal year.
2. Caps: ratio of the number of caps that meets the criteria to the total number of those containing polyester fiber to be purchased in the fiscal year.

16. Interior Fixtures and Bedding

16-1. Curtains, etc.

(1) Items and Evaluation Criteria

Curtains Cloth blinds	**Evaluation Criteria** Products whose fiber content (natural and chemical) includes polyester fiber or synthetic fiber made from vegetable must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers used. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2) Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers used, and a system for collecting, reuse and recycling materials after product use is established. (3) Products whose fiber content includes non biodegradable synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. (4) Products whose fiber content includes non biodegradable synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 10% by weight of all fibers used and also a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1) The use of brominated fire retardants is as minimized as possible. (2) A system for collecting, reuse and recycling materials after product use is established. (3) Fibers other than polyester from recycled PET resin should use unused fiber or reconstructed fiber as much as possible. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Metal blinds	**Evaluation Criteria** Solar reflectance is no less than the numeric value shown in Table**.** **Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as

hook, runner, bracket and sewing thread, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) and synthetic fiber or plastic made from vegetable whose reductional effect of environmental load has been confirmed may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins or synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed".

3. ***Biodegradable*** denotes the performance of no less than 60% according to biodegradability examination (OECD 301C, JIS K 6950, JIS K 6951, JIS K 6953, and JIS K 6955, etc. The examination period depends for the period that each examination method provides.). ***Non biodegradable*** denotes the performance of no biodegradability.
4. ***Synthetic fiber whose reductional effect of environmental load has been confirmed*** denotes material whose reductional effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
5. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.
   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

   A system for reuse and recycling should fulfill the below requirements c. and d.

   c. The collected products must be reused, material recycled and chemical recycled.
   d. The parts that cannot be reuse or recycling of collected products must energy recovered.

6. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).

7. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
8. The measuring method and calculating method for solar reflectance are according to JIS R 3106. L*value of those are according to JIS Z 8781-4.
9. When cleaning the products, procurement organization should consider to choose the business who executes cleaning that fulfills the evaluation criteria of "Laundry and dry cleaning" (refer to ***Laundry and dry cleaning*** section).

Table : The standard for solar reflectance

L* value	The solar reflectance(%)
70.0 or less	40.0
More than 70.0, but less than 80.0	50.0
More than 80.0	60.0

(2) Target Setting Guideline

Ratio of the units of curtains, cloth blinds those containing polyester fiber and metal blind meet the criteria to the total number of to be purchased in the fiscal year.

16-2. Carpets

(1) Items and Evaluation Criteria

Tufted carpets Tile carpets Woven carpets	**Evaluation Criteria** Recycled material including unused fiber, recycled fiber, recycled plastic and other recycled material makes up at least 25% of weight of entire product. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact when disposing.
Needle-punch carpets	**Evaluation Criteria** Must fulfill one of the following. (1) Recycled material including unused fiber, recycled fiber, recycled plastic and other recycled material makes up at least 25% of weight of entire product. (2) Products includes synthetic fiber made from vegetable must fulfill one of the following. a. Products whose fiber content includes biodegradable synthetic fiber or plastic made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. b. Products whose fiber content includes non biodegradable synthetic fiber or plastic made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. c. Products whose fiber content includes non biodegradable synthetic fiber or plastic made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 10% by weight of all fibers used and also a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1)A system for collecting, reuse and recycling materials after product use is established. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Weight of entire product*** denotes that weight of all fibers, added resins and inorganic

fraction, etc.

2. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).
3. ***Recycled fiber*** is created from part or all of material discarded from the production of recycled fiber, from remnants discarded during the manufacturing process, or from the reuse of defective articles.
4. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
5. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
6. ***Recycled material*** denotes part or all of material once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, material that has been recycled in the process of manufacturing the product).
7. ***Biodegradable*** denotes the performance of no less than 60% according to biodegradability examination (OECD 301C, JIS K 6950, JIS K 6951, JIS K 6953, and JIS K 6955, etc. The examination period depends for the period that each examination method provides.). ***Non biodegradable*** denotes the performance of no biodegradability.
8. ***Synthetic fiber whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
9. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.
   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

   A system for reuse and recycling should fulfill the below requirements c. and d.

   c. The collected products must be reused, material recycled and chemical recycled.
   d. The parts that cannot be reuse or recycling of collected products must energy recovered.

(2) Target Setting Guideline

Ratio of products that meet the criteria (m2) to the total amount of products to be purchased in the fiscal year (m2).

16-3. Blankets, etc.

(1) Items and Evaluation Criteria

Blankets	**Evaluation Criteria** Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers used. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2)Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers used, and a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fibers other than polyester from recycled PET resin should use unused fiber or reconstructed fiber as much as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Comforters	**Evaluation Criteria** Must fulfill one of the following. (1) Comforters that use either as fiber (natural and chemical) for both cover and filling polyester fiber products must fulfill one of the following. a. Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers of comforter's cover and the filling. If polyester fibers are used less than 50% by weight of all fibers of comforter's cover and the filling, accounts for no less than 10% by weight of all fibers of comforter's cover and the filling, and no less than 50% by weight of polyester fibers. b. Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers, and a system for collecting, reuse and recycling materials after product use is established. (2) The filling contains 80% or more by weight of filling obtained from used comforters that have been appropriately washed and disinfected for recycled use. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fibers other than polyester from recycled PET resin should use unused fiber or reconstructed fiber as much as possible. (3) Packaging and stowage is to be as simple as possible and take into

	account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as button, fastener, hook and sewing thread, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins".
3. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).
4. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
5. ***Filling*** in the evaluation criteria for comforters refer to cotton, lamb wool, down and synthetic material that are used to fill comforters.
6. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.

   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

   A system for reuse and recycling should fulfill the below requirements c. and d.

   c. The collected products must be reused, material recycled and chemical recycled.

   d. The parts that cannot be reuse or recycling of collected products must energy recovered.
7. When cleaning the products, procurement organizations should consider to choose the business who executes cleaning that fulfills the evaluation criteria of "Laundry and dry cleaning" (refer to ***Laundry and dry cleaning*** section).

(2) Target Setting Guideline

1. Blankets: ratio of the number of blankets meeting the criteria to the total number of those containing polyester fiber to be purchased (including lease/rental agreements) in the fiscal year.
2. Comforters: ratio of the number of comforters meeting the criteria to the total number of those containing polyester fiber, or containing recycled filling, to be purchased (including lease/rental agreements) in the fiscal year.

16-4. Beds

(1) Items and Evaluation Criteria

Bed frames	**Evaluation Criteria** With the exception of metals, the primary material must meet, of the criteria below, (1) for plastic, (2) for wood, and (3) for paper. In addition, items whose secondary material include wood must meet (2) a. Items whose secondary material include paper (with the exception of virgin pulp manufactured with lumber obtained from thinning, or with recycled wood pieces obtained from plywood or lumber factories) must meet (3) b. (1) Recycled plastic makes up no less than 10% in weight of all plastic used. (2) Must fulfill the following. a. Lumber obtained from thinning, recycled wood pieces obtained from plywood or lumber factories, or lumber used as raw material, or the pulpwood used is in compliance with the regulations concerning forestry in its country or geographical area of origin. b. Discharge rate of formaldehyde from materials is no greater than 0.02 mg/m²h, or the equivalent. (3) Must fulfill the following. a. At least 50% recycled pulp content. b. If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. **Factors for Consideration** (1) Designed for long-term use, taking into account maintenance, repair, and the replaceability of parts that wear. Designed to enable component reuse and easy disassembly for refurbishment and recycling, or the appropriate disposal of the separated parts after the item's useful life. Special care taken in the design of the item's metal components to enable long-term use, conservation of resources, and reuse of materials. (2) If the material includes wood, lumber that is used as the raw material (with the exception of lumber obtained from thinning, or recycled wood pieces obtained from plywood or lumber factories) is to be obtained from a forest that is conducting a sustainable operation. (3) If the material includes paper, and furthermore, if virgin pulp is used, pulpwood that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. (4) Packaging and stowage is to be as simple as possible and take

	into account ease of recycling and reduced environmental impact upon disposal. (5) A system for the collection and reuse/recycling of packaging, etc. is considered.
Mattresses	**Evaluation Criteria** (1) Products includes polyester fiber or synthetic fiber made from vegetable used for filling components must fulfill one of the following. a. Products include polyester fiber accounts for no less than 25% polyester from recycled PET resins by weight of all fibers used. b. Products include synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. (2) All fiber used for felt must be unused fiber or reconstructed fiber. (3) The amount of free formaldehyde excreted from material not to exceed 75 ppm. (4) Fluorocarbons are not used as expanding agent for urethane foam. **Factors for Consideration** (1) The item is designed for long-term use, so that any consumable parts can be replaced and, after the item's useful life, it can be dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. Items that are used for special purposes such as medical care, nursing, or advanced medical care shall not be included in ***bed frames*** under consideration in the evaluation criteria of this section.
2. Items that are used for advanced medical care (operating table, ICU bed, etc.) shall not be included in ***mattresses*** under consideration in the evaluation criteria of this section.
3. Fluorocarbons are the materials defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001).
4. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product).
5. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
6. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as button, fastener, hook and sewing thread, etc. from all of product. The weight of accessories used recycled plastic and synthetic fiber or plastic made from vegetable whose reductional effect of environmental load has been confirmed may be include

"the weight of all fibers" and "the weight of polyester from recycled PET resins or synthetic fiber made from vegetable whose reductional effect of environmental load has been confirmed".

7. Discharge rate of no greater than 0.02 mg/m²h, or the equivalent denotes the following. Beds for domestic use which meet this formaldehyde discharge according to JIS S 1102 fill this standard.
    a. Wood material with a corresponding Japan Industrial Standard or Japan Agricultural Standards, whose criteria for formaldehyde discharge is regulated, must meet the criteria for F☆☆☆.
    b. Wood material that does not qualify for the standards outlined in item (a.) above must satisfy the below numbers when evaluated according to the method determined by JIS A 1460.

Average	Maximum
0.5 mg/L	0.7 mg/L

8. ***Synthetic fiber whose reductional effect of environmental load has been confirmed*** denotes material whose reductional effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
9. ***Felt*** denotes items created by forming linear fiber material into a sheet by needle-punch processing method. (This does not include items that use thermoplastic material or employ a bonding agent.)
10. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).
11. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
12. Evaluation criteria for bed frames were determined for products whose primary material other than metal is plastic, wood, or paper. Under consideration in the evaluation criteria, it does not include products whose primary material is metal and does not use plastic, wood, or paper.
13. When purchasing bed frame and mattress as a unit, each part shall comply to the respective criteria above.
14. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
    In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

(2)Target Setting Guideline

Ratio of the number of bed frames, mattresses, and bed frames and mattresses acquired as a unit meeting the criteria to the total number of those to be purchased (including lease/rental agreements) in the fiscal year.

17. Work Gloves

(1) Items and Evaluation Criteria

Work gloves	**Evaluation Criteria** Must fulfill one of the following. (1) Polyester fiber products shall include polyester from recycled PET resins. At least 50% by weight of all natural and chemical fiber used (excluding anti-slip coating) shall be polyester from recycled pet resins. (2) Fiber comprised of post-consumer material makes up at least 50% by weight of the entire product weight (excluding anti-slip coating). **Factors for Consideration** (1) Fibers other than polyester from recycled PET resin should also be made of unused fiber or reconstructed fiber (excluding anti-slip coating). (2) Does not use bleaches.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Post-consumer material*** refers to material or product discarded after used as a product.
3. ***Unused fiber*** is created from short fiber produced during spinning (i.e. linter).
4. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.

(2) Target Setting Guideline

Ratio of the number of pairs of gloves meeting the criteria to the total number of pairs of gloves to be purchased in the fiscal year.

18. Other Fiber Products

18-1. Tents and Sheets

(1) Items and Evaluation Criteria

Tents	**Evaluation criteria** Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2) Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers, and a system for collecting, reuse and recycling materials after product use is established. **Factors for consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Tarps	**Evaluation criteria** At least 50% by weight of fiber (natural and chemical) used in polyethylene fiber products shall be recycled polyethylene fibers. **Factors for consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as pole, fastener and metal parts, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins".
3. ***Recycled polyethylene*** denotes part or all of polyethylene once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, polyethylene that has been recycled in the process of manufacturing the product).
4. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to

collect; includes situations where multiple businesses undertake the collection together) used products.

b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

A system for reuse and recycling should fulfill the below requirements c. and d.

c. The collected products must be reused, material recycled and chemical recycled.

d. The parts that cannot be reuse or recycling of collected products must energy recovered.

(2)Target Setting Guideline

Ratio of the number of tents that use polyester fiber or tarps that use polyethylene fiber meeting the criteria to the total number of tents that use polyester fiber or tarps that use polyethylene fiber to be purchased (including lease/rental agreements) in the fiscal year.

18-2. Safety Nets

(1) Items and Evaluation Criteria

Safety nets	**Evaluation criteria** All fiber products (natural and chemical) that use polyester fiber, polyethylene fiber, or synthetic fiber made from vegetable shall meet the following. (1) Polyester fiber products must fulfill one of the following. a. Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers. If polyester fibers are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. b. Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers, and a system for collecting, reuse and recycling materials after product use is established. (2) At least 50% by weight of fiber used in polyethylene fiber products shall be recycled polyethylene. (3) Products whose fiber content includes synthetic fiber made from vegetable whose reductive effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. **Factors for consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories of metal parts, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) and synthetic fiber or plastics made from vegetable that is acknowledged for its environmental load reduction effects may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins or synthetic fiber made from vegetable that is acknowledged for its environmental load reduction effects".
3. ***Recycled polyethylene*** denotes part or all of polyethylene once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, polyethylene that has been recycled in the process of manufacturing the product).
4. ***Synthetic fiber whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of

the product throughout its lifecycle.

5. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.

   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

   A system for reuse and recycling should fulfill the below requirements c. and d.

   c. The collected products must be reused, material recycled and chemical recycled.

   d. The parts that cannot be reuse or recycling of collected products must energy recovered.

(2) Target Setting Guideline

Ratio of the number of safety nets that use polyester, polyethylene, or vegetable based synthetic fiber meeting the criteria, to the total number of safety nets that use either polyester, polyethylene, or vegetable based synthetic fiber to be purchased in the fiscal year.

18-3. Flags, Advertisement Flags and Banners, etc.

(1) Items and Evaluation Criteria

Flags Advertisement flags Banners	**Evaluation criteria** (1) Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. a. Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers used. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. b. Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers used, and a system for collecting, reuse and recycling materials after product use is established. (2) Products whose fiber content includes synthetic fiber made from vegetable whose reductive effect of environmental load has been confirmed accounts for no less than 25% by weight of all fibers used. **Factors for consideration** (1) The use of brominated fire retardants is as minimized as possible. (2) A system for collecting, reuse and recycling materials after product use is established. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Banners*** under the evaluation criteria of this section denote horizontal banners and vertical banners.
2. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
3. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as pole and metal parts, etc. from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) and synthetic fiber or plastics made from vegetable that is acknowledged for its environmental load reduction effects may be include “the weight of all fibers” and “the weight of polyester from recycled PET resins or synthetic fiber made from vegetable that is acknowledged for its environmental load reduction effects”.
4. ***Synthetic fiber whose reductive effect of environmental load has been confirmed*** denotes material whose reductive effect of environmental load has been confirmed by a third party such as an LCA expert through a quantitative, objective and scientific analysis and evaluation, including effects of trade off, of the environmental load of the product throughout its lifecycle.
5. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of

the below requirements.

A system for collection should fulfill the below requirements a. and b.

a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.
b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is available from the products body, package, catalog and website for the users.

A system for reuse and recycling should fulfill the below requirements c. and d.

c. The collected products must be reused, material recycled and chemical recycled.
d. The parts that cannot be reuse or recycling of collected products must energy recovered.

(2)Target Setting Guideline

Ratio of the number of flags, advertisement flags and banners, etc. that use polyester fiber or synthetic fiber which is made from vegetable based plastics meeting the criteria to the total number of flags, advertisement flags, banners, etc. to be purchased in the fiscal year.

18-4. Mops

(1) Items and Evaluation Criteria

Mops	**Evaluation criteria** Must fulfill one of the following. (1) Recycled material including unused fiber, recycled fiber, and other recycled material makes up at least 25% of weigh of all fibers. (2) Recycled material including unused fiber, recycled fiber, and other recycled material makes up at least 10% of weight, and a system for collecting, reuse and recycling materials after product use is established. **Factors for consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as handle, grip and metal parts, etc. from all of product. The weight of accessories used recycled plastic may be includes "the weight of all fibers" and "the weight of unused fiber, recycled fiber and other recycled material".
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)
3. ***Unused fiber*** is created by reusing short fiber produced during spinning (i.e. linter).
4. ***Recycled fiber*** is created from part or all of material discarded from the production of recycled fiber, from remnants discarded during the manufacturing process, or from the reuse of defective articles.
5. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
6. ***Recycled material*** denotes part or all of material once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, material that has been recycled in the process of manufacturing the product).
7. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.

   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products is

available from the products body, package, catalog and website for the users.

A system for reuse and recycling should fulfill the below requirements c. and d.

c. The collected products must be reused, material recycled and chemical recycled.

d. The parts that cannot be reuse or recycling of collected products must energy recovered.

(2) Target Setting Guideline

Ratio of the number of mops that meeting the criteria to the total number of mops to be purchased (including lease, rental agreements) in the fiscal year.

19. Facilities

(1)Items and Evaluation Criteria

Solar power generation systems (for public and industrial use)	**Evaluation Criteria** (1) The cell effect conversion efficiency of the solar cell module must not fall below the standard conversion efficiency at each category shown in Table. (2) Information for solar cell module and peripherals listed for each category in Appendix table 1 is publicly listed and easy to acknowledge. (3) Electric power generated can be easily acknowledged. (4) The product is designed and manufactured in such a way that the solar cell module can maintain at least 80% of nominal maximum output for at least 10 years. (5) The power conditioner is designed and manufactured in such a way that the effectiveness of its rated load factor and the partial load factor at half load can be maintained at a minimum of 90% of its effectiveness at shipping. (6) The energy payback time of solar cell module is no more than three years. **Factors for Consideration** (1) The product is designed either for easy repair and exchange of parts to enable long term use, or designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts. (2) Devices to be installed in facilities with a large number of visitors should be equipped with a system that enables effective description to the visitors through the display of generated power, etc., as much as possible. (3) In cases where secondary battery containing specified chemical substances is used, a collection and recycling system for the secondary battery is put in place. (4) Products that use aluminum alloy on the frame or platform of the battery module must use an alloy that uses aluminum secondary ore (regenerated ore) as a part of its primary material. (5) The product does not use lead soldering.
Solar heating systems (for public and industrial use)	**Evaluation Criteria** (1) When the amount of insolation is 20,930kJ/(m2 day) and atmospheric temperature subtracted from the average temperature of the energy collecting medium equals 10K, the collection amount is no less than 8,372kJ/(m2 day). (2) The items listed in Table 2 for the energy collector and its

	peripheries can be easily confirmed on websites, etc. **Factors for Consideration** (1) The product is designed either for easy repair and exchange of parts to enable long term use, or designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts. (2) The design enables minimum energy requirements for the operation of the energy collectors. (3) Products that use aluminum alloy on the frame or platform must use an alloy that uses aluminum secondary ore (regenerated ore) as a part of its primary material. (4) The product does not use lead soldering.

Note:

1. ***Solar power generation system*** under consideration in the Evaluation Criteria refers to systems for public and industrial use that supply energy through solar power generation using solar cell module of 10kW or more as a replacement for commercial energy.
2. ***Solar heating system*** under consideration in the Evaluation Criteria refers to systems for public and industrial use that uses solar energy for hot water and heating.
3. ***The cell effect conversion efficiency of the solar cell module*** denotes the cell effect conversion efficiency after modularization based on the effect conversion efficiency according to JIS C 8960 and to be calculated using the following formula.

   The cell effect conversion efficiency = nominal maximum power/
   (Total area of the solar cell module × irradiance)

   Total area of solar battery cell × Total area of one cell × Number of cell in one module

   Irradiance =1000W/m2

   The total area of one cell includes non-power generation part in the cell. However, the total area of one cell as to thin-film silicon solar cell and compound-semiconductor solar cell excludes the integrated part.

4. ***Rated load factor*** and ***Partial load factor*** are to be calculated in accordance with JIS C 8961.
5. ***Collection amount*** is to be calculated in accordance with JIS A 4112. ***Solar heating system that fills*** JIS A 4112 meet this criteria.
6. Confirmation of eligibility confirmation examination and of model attestation of solar cell module will be determined in accordance with JIS C 8990 or JIS C 8991.
7. ***Each procurement organization*** should take the following into full consideration:

a. For proper understanding and management of power generated or collected, the information in the installment report items in Tables 1 and 2, obtained at the time of procurement, must be maintained and preserved until the product is discarded.
b. Installation requirements and methods of the equipment for power generation or collection must be fully considered upon procurement. Excess enlargement of platform for installation should be avoided.
c. For the introduction of solar power generation systems, adequate installation requirements and methods must be considered by taking into full consideration the characteristics of the solar cell. For the introduction of thin membrane solar cells, reduction of environmental load, such as the adequate installation structure on the side of the installation dealer, should be fully considered.
d. The introduction of the solar heating system should be implemented through a design that takes the current energy usage in full consideration.
e. When procuring the facilities, the details of the installation should be requested from the installation dealer, and its contents confirmed. The information required for the maintenance and management of the facilities concerned (including information from the manufacturer) should be obtained from the installation dealer.

Table : Standard for the cell effect conversion efficiency of solar cell module

Category	Standard Conversion Efficiency
Single-crystal silicon solar cell	16.0%
Poly-crystal silicon solar cell	15.0%
Thin-film silicon solar cell	8.5%
Compound-semiconductor solar cell	12.0%

Appendix Table 1 : Items for Display of Information Regarding Solar Power Generation Equipments

Category	Items	Articles for confirmation
Solar cell module	Display of estimation device for generated energy (standard condition)	Annual estimated generated energy measured at standard conditions designated by JIS C 8904-2
		Conditions for calculation (sunlight data used, loss of solar cell and power conditioner, etc.)
	Conditions and factors for inability to obtain generated energy at standard condition	Influence of shadows, sunlight conditions (note specifically the correspondence between the amount of shadow on the module or sunlight conditions and the decrease in generated energy)
		Influence of temperature (note specifically the correspondence between module temperature and the decrease in

		generated energy)
		Climatic conditions, geographic conditions (note specifically the correspondence between climatic and geographic conditions and amount of generated energy)
		Others (note specifically losses due to wiring and stains on the reception surface)
Peripheries	Power conditioner	Format, nominal capacity, output energy method, frequency, system connecting method, etc.
	Connector box	Format, etc.
	Connector protection device	Possible installation methods
	Secondary cell	Whether used or not. If used, method of collection and recycling
Requirements for maintenance, testing and repair	Maintenance and testing	Scope and method
	Repair	Scope and method
Modules and peripheries	Disposal	Method of disposal, points to consider when disposing, etc.
	Warranty condition	Warranty period, etc.

Appendix Table 2 : Items for Display of Information Regarding Solar Heating Systems

Category	Articles	Items for confirmation
Energy collector	Display of method of estimation for amount of energy collected	Estimated amount of energy collected annually
		Conditions for calculation (sunlight data used, loss of solar cell and power conditioner, etc.)
	Conditions and factors for the inability to obtain an effect rate of 40%	Influence of shadows, sunlight conditions (note specifically the correspondence between the amount of shadow on the module or sunlight conditions and the decrease in generated energy)
		Influence of temperature (note specifically the correspondence between module temperature and the decrease in generated energy)
		Climatic conditions, geographic conditions (note specifically the

		correspondence between climatic and geographic conditions and amount of generated energy)
		Others (note specifically losses due to wiring and stains on the reception surface)
Energy collector and peripheries	Disposal	Method of disposal, points to consider when disposing, etc.
	Maintenance and testing	Conditions for maintenance and testing (frequency of testing), etc.
	Warranty condition	Conditions for warranty (scope and content of repair and exchange), warranty period, etc.

Fuel cells	**Evaluation Criteria** System generates electric or heat energy by chemical reaction between hydrogen in the fuel and oxygen in the air, as an alternative to commercial power. **Factors for Consideration** The items are designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts.
Garbage disposals	**Evaluation Criteria** Equipment decreases the amount of garbage by biodegrading or dehydration. **Factors for Consideration** (1) The items are designed so that any consumable parts can be replaced and, after the item's useful life, it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling, or the appropriate disposal of its separated parts. (2) Functions that allow for energy saving while in use are built into design. (3) Product generated from disposal is reused as fertilizer, feed, and energy.
Water saving equipments	**Evaluation Criteria** **<Common Criteria>** No electric energy shall be used. **< Individual Criteria>** (1) For water saving top, meet the following requirements: a. When the handle is opened 120 degrees, the discharge rate shall be more than 20% but not be more than 70% of that

	when the water tap equipped with an ordinary top. b. When the handle is fully opened, the discharge rate shall be not less than 70%. (2) For flow-control valve, when the handle is fully opened, the proper flow shall be in the range of 5-8 liters/min at a water pressure of 0.1 MPa or more and at 0.7MPa or lower. (3) For aerator cap, meet the following requirements: a. At a water pressure of 0.1 MPa or more and at a water pressure of 0.7 MPa or less, the discharge shall not be more than 80% of that of the tap without the aerator cap. b. The discharge shall not be less than 5 liters/min at a water supply pressure of 0.1 MPa with a fully opened lever. **Factors for Consideration** (1) Replacement water saving pieces should be easily replaceable with regular pieces. (2) The user should feel little difference after the water saving equipments are installed. (3) The type to be installed on faucets should be adaptable to a variety of faucets.

Note:

1. ***Water saving top*** refers to pieces produced to be placed on stopcock for water saving purposes. Water supply device supplemented with a water saving piece will yield much less water when compared to a device with regular piece when the handle is opened to the sane angle. Fixed type tops are included.
2. ***Water saving top*** in Evaluation Criteria in this section is the type to be used for single stopcock with an internal diameter of 13mm. It should enable water savings through a simple replacement by changing the shape of the stabilizing nut of the valve packing into a special shape, etc.
3. Measuring method for the discharge rate of water saving top is according to measuring method of flow volume based on JIS B 2061(Faucets, ball taps and flush valves). Water saving equipments that comply with ***The water tap equipped with a water-saving top*** designated in JIS B 2061 meets the Evaluation Criteria <Individual Criteria> (1).
4. ***Flow-control valve*** refers to a adjustment valve that maintains water flow at a fixed rate regardless of the water pressure of either side of the valve. Those capable of setting the water flow rate are called water flow adjustment valve; those with a fixed water flow rate are called fixed water flow valve.
5. ***Flow-control valve*** under consideration in this section are those used for washing hands and face, as well as dishes. They are to fulfill the following criteria:
    a. The valve allows for water savings, when replaced with a conventional one, by controlling the amount of water discharged.
    b. There is not to be a branching out except for at the installment locations. Flow-control valve should be placed after the branching out. Each Flow-control valve should correspond to one stopcock.
    c. Installment criteria for each use are outlined in the users manual so that installment can be executed according to use.

6. ***Aerator cap*** under consideration in this section refers to caps that enable water savings by mixing air into water flow.

Sunlight adjustment film	**Evaluation criteria** (1) Shielding coefficient is less than 0.7 and transmission rate for visible ray is 10% or more. (2) Heat transmission rate is less than 5.9W/(m2.k). (3) Adequate weather resistance is confirmed for sunlight adjustment function. (4) After use of the product, decrease in environmental load is confirmed when compared to the condition before use. (5) (1) to (4) above can be easily confirmed on websites, etc., or otherwise, is judged objectively by a third party. (6) Adequate information is displayed concerning the application of film. **Factors for Consideration** Shielding coefficient is as low as possible.

Note:

1. ***Sunlight adjustment film*** refers to films applied onto window glass of buildings and are equipped with the ability to shield sunlight in order to increase the efficiency of air conditioning.
2. Shielding coefficient, transmission rate for visible ray, and heat transmission rate are to be calculated in accordance with JIS A 5759.
3. As for evaluation criteria (1), if transmission rate for visible ray is more than 70%, shielding coefficient is less than 0.8.
4. In order to confirm the ***weather resistance*** of sunlight adjustment function, conduct 1,000 hour testing in accordance with weather resistance testing designated in JIS A 5759, and make sure that the change in shielding coefficient is within ±0.10 of the standards designated in Evaluation Criteria (1).
5. ***After use of the product, decrease in environmental load is confirmed when compared to the condition before use*** means that decrease in cooling load is confirmed in a simulation of heat load calculation system that takes radiant heat into account.
6. Each procurement organization must take into account the following.
   a. In procuring sunlight adjustment film**,** construction by the person having a technological qualification of "1st or 2nd grade Certified Skilled Worker of Architectural Film" or the equal, to avoid the heat crack, etc. of the glass.
   b. Consider the influence by the electric wave cover when attaching the one to have the electric wave cover performance.
   c. Confirm the influence on a peripheral building, etc. when attaching it in the situation of remarkable sunlight reflection is concerned.
   d. In case requiring illumination efficiency and passage of daylight, consider to attaching the film with high transmission rate for visible ray.

(2)Target Setting Guideline

A. For solar power generation systems, target is determined by the total capacity of power generation by the facility that meets the criteria to be purchased in the fiscal year (kW).
B. For solar heating systems, target is determined by the total are of solar collection equipment that meets the criteria to purchase in the fiscal year (m2).
C. For systems combining solar power generation and solar heating, target is determined by both the total capacity of power generation (kW) and the total area of solar collection equipment (m2) of the facility that meets the criteria to be purchased in the fiscal year.
D. For fuel cells, target is determined by the total capacity of power generation (kW) in the fiscal year.
E. For garbage disposals, target is determined by the number of equipments to be purchased (including lease, rental agreements, and acquisition by companies commissioned to operate cafeterias) in the fiscal year.
F. For water saving equipments, target is determined by the total number of devices meeting the criteria to the total number of devices to be purchased in the fiscal year.
G. For sunlight adjustment films, target is determined by the total area of the product (m2) that meets the criteria to the total number of product (m2) to be purchased in the fiscal year.

20. Stockpiles for Disaster

20-1 Stockpiles for Disaster (Potable Water)

(1) Items and Evaluation Criteria

PET bottled water	**Evaluation Criteria** (1) Expiration date is over five years. (2)Name, ingredients, content amount, expiration date, recommended method of storage, and name of manufacturer are listed on the product and the external package. **Factors for Consideration** (1) A system exists for minimizing waste production through collection and recycling. (2) Bottles are designed to be as thin and light weight as possible. (3) Taking environmental issues into consideration, bottles, labels/label printing, caps etc., are designed to create a container with superior adaptability for recycling and reuse.

Note:

1. ***PET bottled water*** under consideration in this section is to be obtained with an objective of long term stockpiles for disaster.
2. Evaluation Criteria (2) concerning ingredients does not apply for the external package.
3. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
4. Each procurement organization must take into account the following.
   a. In procuring PET bottled water, take into consideration use of automatic vending machines equipped with the ***free-vend*** function, which is a disaster prevention measure that allows products inside the machine to be vended free of charge in case of distribution stockpile or an outbreak of disaster.
   b. In procuring stockpiles for disaster, design a system for storage and purchase of products based on their expiration date to enable adequate maintenance and regular renewal of storage and purchase quantities.
   c. In order to lengthen the storage time of products, consider a contract method that, for example, allows a set amount of time until delivery date, so that the supplier may prepare products that are as new as possible.
   d. In procuring PET bottled water for the disaster, confirming enough beforehand such as quality and safety in the best-before date of a product on account of savings and keeping over a long period of time.
5. In order to consider environmental issues, reference will be made to “Designated PET Bottle Voluntary Design Guideline” created by PET Bottle Recycle Promotion Association when designing bottles, labels/label printing, caps etc.

(2) Target Setting Guideline

Ratio of the number of PET bottled water meeting the criteria to the total number of PET bottled water purchased in the fiscal year.

20-2. Stockpiles for Disaster (Food)

(1) Items and Evaluation Criteria

Canned food Quick cooking rice Non-perishable bread for an emergency Pilot bread	**Evaluation Criteria** (1) Expiration date is over five years. (2) Name, ingredients, content amount, expiration date, recommended method of storage, and name of manufacturer are listed on the product and the external package. **Factors for Consideration** A system exists for minimizing waste production through collection and recycling.
Retort processed food, etc.	**Evaluation Criteria** (1) Fulfills one of the following. a. Expiration date is over five years. b. Expiration date is over three years later, and a system is in place for the collection and recycling of the container, accessory material and heat generating material. (2) Name, ingredients, content amount, expiration date, recommended method of storage, and name of manufacturer are listed on the product and the external package. **Factors for Consideration** A system exists for minimizing waste production through collection and recycling.
Health foods/ Nutrition foods Freeze-dried foods	**Evaluation Criteria** (1) Expiration date is over three years. (2) Name, ingredients, content amount, expiration date, recommended method of storage, and name of manufacturer are listed on the product and the external package. **Factors for Consideration** A system exists for minimizing waste production through collection and recycling.

Note:

1. ***Canned food, Quick cooking rice, Non-perishable bread for an emergency, Pilot bread,*** and ***Retort processed food, etc., Health foods/Nutrition foods and Freeze-dried foods*** under consideration in this section is limited to those procured for the purpose of stockpiles for disaster.
2. ***Retort processed food, etc.*** refers to products that have been processed for long term preservation at room temperature by packing food in air-tight containers and sealing with heat melting method.
3. ***Health foods / Nutrition foods*** refer to foods of usual food form and strengthened nutritional contents such as the vitamins and minerals.
4. Regarding Evaluation Criteria (1) for ***Canned food***: During the period until the product that fills the evaluation criteria is supplied enough to the market, the product

which expiration date is three years or more is considered as designated procurement item. The period of time for which the exception is applicable will be determined in consideration with market movement.

5. Evaluation Criteria (1) concerning expiration date for ***Quick cooking rice*** and ***Pilot bread*** will be reconsidered taking into consideration future market movements.
6. Evaluation Criteria (2) concerning ingredients does not apply for the external package.
7. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
8. Each procurement organization must take into account the following.
   a. In procuring stockpiles for disaster, design a system for storage and purchase of products based on their expiration date to enable adequate maintenance and regular renewal of storage and purchase quantities.
   b. In order to lengthen the storage time of products, consider a contract method that, for example, allows a set amount of time until delivery date, so that the supplier may prepare products that are as new as possible.
   c. In procuring foods for the disaster, confirming enough beforehand such as quality and safety in the best-before date of a product on account of savings and keeping over a long period of time.

(2)Target Setting Guideline

Ratio of the number of products meeting the criteria to the total number of products purchased in the fiscal year.

20-3. Stockpiles for Disaster (Household items and materials, etc.)

(1)Items and Evaluation Criteria

Blankets	**Evaluation Criteria** Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers. If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2) Polyester from recycled PET resins accounts for no less than 10% by weight of all fibers, and a system for collecting, reuse and recycling materials after product use is established. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fibers other than polyester from recycled PET resin should use unused fiber or reconstructed fiber as much as possible. (3) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Work gloves	**Evaluation Criteria** Must fulfill one of the following. (1) Polyester fiber products shall include polyester from recycled PET resins. At least 50% by weight of all natural and chemical fiber used (excluding anti-slip coating) shall be polyester from recycled pet resins. (2) Fiber comprised of post-consumer material makes up at least 50% by weight of the entire product weight (excluding anti-slip coating). **Factors for Consideration** (1) Fibers other than polyester from recycled PET resin should also be made of unused fiber or reconstructed fiber (excluding anti-slip coating). (2) Does not use bleaches.
Tents	**Evaluation criteria** Products whose fiber content (natural and chemical) includes polyester fiber must fulfill one of the following. (1) Polyester from recycled PET resins accounts for no less than 25% by weight of all fibers. . If polyester fibers are used less than 50% by weight of all fibers, accounts for no less than 10% by weight of all fibers, and no less than 50% by weight of polyester fibers. (2) Polyester from recycled PET resins accounts for no less than

	10% by weight of all fibers, and a system for collecting, reuse and recycling materials after product use is established. **Factors for consideration** (1)A system for collecting, reuse and recycling materials after product use is established. (2)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.
Tarps	**Evaluation criteria** At least 50% by weight of fiber (natural and chemical) used in polyethylene fiber products shall be recycled polyethylene fibers. **Factors for consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fibers*** denotes the weight of all product excluding accessories such as button, fastener, hook, sewing thread and the metal parts (i.e. pole), from all of product. The weight of accessories used recycled plastic (part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product)) may be include "the weight of all fibers" and "the weight of polyester from recycled PET resins".
3. ***Unused fiber*** is created from short fiber produced during spinning (i.e. linter).
4. ***Reconstructed fiber*** is created by decomposing and creating into linear form materials such as remnants from manufacturing of clothing, and products that are no longer in use.
5. ***Post-consumer material*** refers to material or product discarded after used as a product.
6. ***Recycled polyethylene*** denotes part or all of polyethylene once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, polyethylene that has been recycled in the process of manufacturing the product).
7. ***A system is in place for the collection, reuse and recycling*** denotes the fulfillment of the below requirements.

   A system for collection should fulfill the below requirements a. and b.

   a. The manufacturer or the seller has a system (a collection system located at the manufacturer or the seller, or collection in response to the user's request) for voluntarily collecting (collecting on its own or commissioning other companies to collect; includes situations where multiple businesses undertake the collection together) used products.
   b. In order to precipitate appropriate collection, specific information for the collection (collection method, collection location, etc.) of used products are available from the products body, package, catalog and website for the users.

   A system for reuse and recycling should fulfill the below requirements c. and d.

c. The collected products must be reused, material recycled and chemical recycled.
d. The parts that cannot be reuse or recycling of collected products must energy recovered.

8. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
9. In procuring stockpiles for disaster, design a system for storage and purchase of products based on their expiration date to enable adequate maintenance and regular renewal of storage and purchase quantities.

Disposable batteries	**Evaluation Criteria** (1) Disposable batteries must exceed the smallest average duration listed in accordance to load resistance in Table below. (2) The product specifications must include a period of over five years is required until the recommended expiration date. **Factors for Consideration** Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Disposable batteries*** under consideration in the evaluation criteria of this section denote "D"C" AA", or "AAA".
2. ***Smallest average duration*** is to be measured in accordance to the electric discharge test criteria designated in JIS C 8515. Disposable batteries that comply with the alkaline battery designated in JIS C 8515 meets this Evaluation Criteria (1).
3. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
4. Each procurement organization must take into account the following.
    a. In procuring stockpiles for disaster, design a system for storage and purchase of products based on their expiration date to enable adequate maintenance and regular renewal of storage and purchase quantities.
    b. In order to lengthen the storage time of products, consider a contract method that, for example, allows a set amount of time until delivery date, so that the supplier may prepare products that are as new as possible.

Table : Smallest Average Duration for Disposable Batteries

IEC designation (size; height : diameter)	Load Resistance (Ω)	Smallest Average Duration	
		Initial Usage	After 12 Months Storage and Recommended Period of Usage
D (61.5mm : 34.2mm)	1.5	520minutes	465minutes
	600(Discharged electricity)	11hours	9.9hours

	10	85hours	76hours
	2.2	16hours	14hours
C (50.0mm : 26.2mm)	3.9(Electrical torch requirement)	800minutes	720minutes
	400mA(Discharged electricity)	8.0hours	7.2hours
	20	80hours	72hours
	3.9(Motor use machine/toy)	14hours	12hours
AA (50.5mm : 14.5mm)	43	60hours	54hours
	3.9	5.0hours	4.5hours
	100mA(Discharged electricity)	15hours	13.5hours
	250mA(Discharged electricity)	5.0hours	4.5hours
	1000mA(Discharged electricity)	220times	195times
	1,500mW 650mW	40times	36times
	24	33hours	29hours
	3.3	190minutes	170minutes
AAA (44.5mm : 10.5mm)	5.1(Electrical torch requirement)	130minutes	115minutes
	24	14.5hours	13.0hours
	5.1(Motor use machine/toy)	2.0hours	1.8hours
	75	44hours	39hours
	600mA(Discharged electricity)	170times	150times
	100mA(Discharged electricity)	7.0hours	6.3hours

Emergency portable fuel	**Evaluation Criteria** (1) Expiration date is over five years later. (2) Name, ingredients, content amount, expiration date, recommended method of storage, and name of manufacturer are listed. **Factors for Consideration** Packaging and container of product is as simple as possible, and has been considered for ease of reuse and the reduction of environmental load.

Note:

1. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.

2. Each procurement organization must take into account the following.
    a. In procuring stockpiles for disaster, design a system for storage and purchase of products based on their expiration date to enable adequate maintenance and regular renewal of storage and purchase quantities.
    b. In order to lengthen the storage time of products, consider a contract method that, for example, allows a set amount of time until delivery date, so that the supplier may prepare products that are as new as possible.

Portable generators	**Evaluation Criteria** (1) Must fulfill one of the following. a. For generators have a gasoline engine (include the one that uses natural gas or LP gas as a fuel) does not exceed the standard rate shown in Table 1. b. For generators have a diesel engine does not exceed the standard rate shown in Table 2. (2) The noise level must be 98 decibels or less. (3) The time for continuous run must be three hours or more. However, cassette gas cylinder type must be one hour or more. **Factors for Consideration** (1) The fuel cost efficiency must be as possible as high. (2) Having the function to control the engine rotational speed automatically according to the load under use. (3) The miniaturization and lightening the product should be attempted. (4) Design consideration takes into account product life, reuse of parts, or recycling of raw material. (5) Packaging and container of product is as simple as possible, and has been considered for ease of reuse and the reduction of environmental load.

Note:

1. ***Portable generators*** under consideration for evaluation criteria in this section denotes power generators whose rated power is 3kVA or less.
2. The measuring method at the noise level depends on "Measuring method of measurements of the noise and the vibration of the construction machinery (No.1537 of the Ministry of Construction notification in 1997)".
3. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
4. Each procurement organization must note the frequency of electricity.

Table 1 : The standard of gas emission of portable generators with gasoline engine.

Category of engine displacement	Gas emission standard (g/kWh)	
	HC+NOx	CO
66cc or less	50	610
Over 66cc and 100cc or less	40	

Over 100cc and 225cc or less	16.1	
Over 225cc	12.1	

Note: The measuring method of gas emission is according to JIS B 8008-4 G2 mode.

Table2: The standard of gas emission of portable generators with diesel engine.

Gas emission standard (g/kWh)		
NMHC+NOx	CO	PM
7.5	8	0.4

Note: The measuring method of gas emission is according to JIS B 8008-4 D2 mode.

(2) Target Setting Guideline

Ratio of the number of products meeting the criteria to the total number of products to be purchased in the fiscal year.

The total for blankets, work gloves, tents, tarps and disposable batteries will include specified items for procurement used for normal business operations as outlined in this Basic Policy.

21. Public-Works Projects

(1) Items and Evaluation Criteria

Public works	**Evaluation Criteria** Contract with the participants, vendors and contractors building the public work should require the use of materials, construction equipment, processes and targets listed in Table 1, that reduce the environmental impact of the public works project. **Factors for Consideration** Packaging is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:
It is preferable to implement obligatory clauses within the overall framework that considers the reduction of environmental impact.

(2)Target Setting Guideline
A guideline will be examined while studying ways to evaluate performance.

Table 1 : Materials, Construction Machines, Construction Methods and Others

Designated Procurement Item	Category	Item		Evaluation Criteria for Each Item
		Item Type	Item Name	
Public works	Material	Banking materials, etc.	Treated soil recycled from construction sludge	Table 2
			Granulated blast furnace slag for earth work	
			Caisson filler using copper slag	
			Caisson filler using ferro-nickel slag	
		Ground improvement material	Steel slag for Ground improvement	
		Slag aggregate for concrete	Blast furnace slag aggregate	
			Ferro-nickel slag aggregate	
			Copper slag aggregate	
			Electric arc furnace oxidizing slag aggregate	
		Asphalt compound	Recycled heated asphalt compound	
			Asphalt compound with steel slag	

			Warm asphalt compound	
		Roadbed material	Roadbed material with steel slag	
			Recycled aggregate, etc.	
		Small -diameter logs	Lumber from thinning	
		Blended cement	Portland blast furnace cement	
			Fly-ash cement	
		Cement	Eco-cement	
		Concrete and products	Water permeable concrete	
		Hydrated solidified steel slag	Steel slag block	
		Spray on concrete	Spray on concrete with fly-ash	
		Paint	Base-coating paint (anti corrosive)	
			Water based road paint using low volatility organic solvent	
			High solar reflectance paints	
		Water proof	High solar reflectance water proof	
		Pavement-material	Pavement blocks using recycled material (burnt)	
			Pavement block products using recycled material (precast unreinforced concrete products)	
		Gardening material	Bark compost	
			Fermented compost using sewage sludge	
		Road illuminations	Environmentally friendly road illuminations	
		Central divider block	Central divider block manufactured with recycled plastic	
		Tiles	Porcelain tiles	
		Doors and windows	Heat insulating sash, doors	
		Lumber, etc.	Lumber	
			Glued laminated timber	
			Plywood	
			Laminated veneer lumber	
		Flooring	Flooring	
		Reconstituted	Particle board	

		wood boards	Fiberboard	
			Wood-type cement board	
		Vinyl floor covering	Vinyl floor covering	
		Insulation	Insulation	
		Lighting fittings	Lighting control system	
		Transformers	Transformers	
		Air conditioning units	Cold and hot water absorption units	
			Ice thermal storage air conditioning units	
			Gas heat pump air conditioning units	
			Fan	
			Pump	
		Plumbing material	Recycle unplasticized polyvinyl chloride pipes for sewage or vent	
		Plumbing fixtures	Automatic shut off faucets	
			Automatic flushing system, and urinals equipped with automatic flushing system	
			Western style toilets	
		Concrete form	Form utilizing recycled material	
			Plywood form	
	Construction machines	N/A	Low-emission construction machines	Table 3
			Low-noise construction machines	
	Construction methods	Effective usage of soil resulting from construction	Effective usage of low quality soil	Table 4
		Recycling treatment of construction sludge	Recycling treatment of construction sludge	
		Recycling treatment of concrete masses	Recycling treatment of concrete masses	

		Pavement (surface)	Road surface recycling method	
		Pavement (roadbed)	Roadbed recycling method	
		Slope surface greening method	Slope surfaces greening method using thinning wood or soil obtained from construction process	
		Sheathing method	Soil cement pillar line wall method of reducing mad	
	Others	High performance paving material	Porous pavement	Table 5
			Permeable pavement	
		Greening of rooftops	Greening of rooftops	

Table 2

Materials

Item Type	Item Name	Evaluation Criteria, etc.
Banking materials, etc.	Treated soil recycled from construction sludge	**Evaluation Criteria** (1) Must be treated soil recycled from construction dirt. (2) Content and elution of toxic material such as heavy metals, etc., must fulfill Regulation for Control of Soil Contamination (May 29, 2002, Regulation No. 53) and Environmental Standards for Soil Contamination (August 23, 1991, Ministry of Environment Notice No. 46).
	Granulated blast furnace slag for earth work	**Evaluation Criteria** Public works material that uses blast furnace slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone is used. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.
	Caisson filler using copper slag	**Evaluation Criteria** Caisson fillers must be copper slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone.
	Caisson filler using ferro-nickel	**Evaluation Criteria** Caisson fillers must be ferro-nickel slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone.
Ground improvement material	Steel slag for ground improve-ment	**Evaluation Criteria** Steel slag must be capable of completely replacing natural sand (sea sand and land sand) using sand compaction pile method. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.

Slag aggregate for concrete	Blast furnace slag aggregate	**Evaluation Criteria** Blast furnace slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone is used. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.

Note:
As for ***Blast furnace slag aggregate***, material that meet the standard of JIS A 5011-1(Slag aggregate for concrete-Part 1: Blast furnace slag aggregate) fills this criteria.

Slag aggregate for concrete	Ferro-nickel slag aggregate	**Evaluation Criteria** Ferro-nickel slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone is used.

Note:
As for ***Ferro-nickel slag aggregate***, material that meet the standard of JIS A 5011-2(Slag aggregate for concrete-Part2 : Ferronnickel slag aggregate) fills this criteria.

Slag aggregate for concrete	Copper slag aggregate	**Evaluation Criteria** Copper slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone is used.

Note:
As for ***Copper slag aggregate***, material that meet the standard of JIS A 5011-3(Slag aggregate for concrete-Part3:Copper slag aggregate) fills this criteria.

Slag aggregate for concrete	Electric arc furnace oxidizing slag aggregate	**Evaluation Criteria** Electric arc furnace oxidizing slag that can replace part or all of natural sand (sea sand and land sand), natural gravel, crushed sand, or crushed stone is used. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.

Note:
As for ***Electric arc furnace oxidizing slag aggregate***, material that meet the standard of JIS A 5011-4(Slag aggregate for concrete-Part 4: Electric arc furnace oxidizing slag aggregate) fills this criteria.

Asphalt compound	Recycled heated asphalt compound	**Evaluation Criteria** Includes aggregate manufactured from asphalt concrete masses.

	Asphalt compound with steel slag	**Evaluation Criteria** Steel slag for roads is used as aggregate for heated asphalt compound. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.

Note:
As for ***Steel slag for roads***, material that meet the standard of JIS A 5015(Iron and steel slag for road construction) fills this criteria.

Asphalt compound	Warm asphalt compound	**Evaluation Criteria** The asphalt compound that lowers the heating temperature at about 30 degrees C when it is manufactured, securing a necessary quality by adding the adjustment medicine.

Note:
Warm asphalt compound is promoted to use as the surface and the base-course material in the asphalt paving. However, it uses a new aggregate for the present. Moreover, it doesn't use it for porous asphalt.

Roadbed material	Roadbed material with steel slag	**Evaluation Criteria** Steel slag for roads is used for roadbed material. **Factors for Consideration** Manufacturer and seller of the steel slag must be identifiable.

Note:
As for ***Steel slag for roads***, material that meet the standard of JIS A 5015(Iron and steel slag for road construction) fills this criteria.

Roadbed material	Recycled aggregate, etc.	**Evaluation Criteria** Includes aggregate manufactured from asphalt concrete masses or concrete masses.
Small-diameter logs	Lumber from thinning	**Evaluation Criteria** Lumber from thinning that does not contain harmful decays or cracks is used.

Blended cement	Portland blast furnace cement	**Evaluation Criteria** Portland blast furnace cement whose raw material contains more than 30% blast furnace slag.

Note:
As for ***Portland blast furnace cement,*** materials that meet the standard of species B or species C based on JIS R 5211 fills this criteria.

Blended cement	Fly-ash cement	**Evaluation Criteria** Fly-ash cement whose raw material contains more than 10% fly-ash.

Note:
As for ***Fly-ash cement,*** materials that meet the standard of species B or species C based on JIS R 5213 fills this criteria.

Cement	Eco-cement	**Evaluation Criteria** Cement that uses ashes resulting from incineration of city waste, etc. as the main ingredient. Cement must contain no less than 500kg in dry weight of such waste material per 1 ton of final product.

Notes:

1. ***1 .Eco-cement*** is to be used for concrete structures and concrete products that do not require high strength.
2. As for ***Eco-cement,*** materials that meet the standard of JIS R 5214 fills this criteria.

Concrete and concrete products	Water permeable concrete	**Evaluation Criteria** Water permeability of the concrete exceeds 1x10-2cm/sec.

Notes:

1. ***Water permeable concrete*** is to be used for areas that require rain water to permeate but do not require high strength.
2. As for ***Water permeable concrete***, material that meet the standard of JIS A 5371(Precast unreinforced concrete products Appendix B pavement/boundary blocks Recommended specification B-1 Monotony) fills this criteria.

Hydrated solidified steel slag	Steel slag block	**Evaluation Criteria** Steel slag listed in Table is no less than 50% by weight of the aggregate. Product uses blast furnace slag powder as binder. **Table** Category Converter slag (includes pig iron slag from preliminary treatment process) Electric furnace oxidized slag **Factors for Consideration** It is possible to find out the manufacturer and seller of steel slag.
Spray-on concrete	Spray-on concrete with fly-ash	**Evaluation Criteria** Spray-on concrete that includes at least 100kg per 1 m^3 fly-ash in its admixture.

Paint	Base coat paint (anti corrosive)	**Evaluation Criteria** Does not contain pigment using lead or chrome.
	Water based road paint using low volatility organic solvent	**Evaluation Criteria** Water based road paint that contains no more than 5% of volatile organic solvent (VOC) (ratio of volatile solvent to total volume of paint).
	High solar reflectance paints	**Evaluation Criteria** (1) The solar reflectance in the near infrared rays region must be over the ratio of the applicable in Table. (2) The average of the solar reflectance retention in the near infrared rays region is 80% or more.

Note:

1. High solar reflectance paints in the evaluation criteria of this section are paints that contain pigments with high solar reflectance, and it is necessary to be used for construction that gives painting to a metallic side etc. in the rooftop and the roof, etc. in the building.
2. The solar reflectance in the near infrared rays region, L* value and the solar reflectance retention are measured and calculated based on JIS K 5675.
3. As for Evaluation Criteria (2), transition period will be applied in the fiscal year 2015, the products may be considered as specified procurement goods if it doesn't meet the evaluation criteria concerned.
4. As for ***High solar reflectance paints,*** materials that meet the standard of JIS K 5675 fills this criteria.

Table : The solar reflectance in the near infrared rays region

L* value	The solar reflectance in the near infrared rays region(%)
40.0 or less	40.0
More than 40.0, but less than 80.0	The ratio of L* value
More than 80.0	80.0

Waterproof	High solar reflectance waterproof	**Evaluation Criteria** The solar reflectance in the near infrared rays region must be 50.0% or more.

Note:

1. High solar reflectance waterproof in the evaluation criteria of this section are paints that contain pigments with high solar reflectance in the material in the water-resistant layer, or paints that have pigments with high solar reflectance are given as finish of the water-resistant layer in the rooftop and the roof, etc. in the building.
2. The solar reflectance is calculated in accordance with JIS K 5602.

<table>
<tr>
<td>Pavement material</td>
<td>Pavement blocks using recycled material (burnt)</td>
<td>
Evaluation Criteria
(1) Uses recycled material (material such as those included in the left column of Table below, and preprocessed where indicated in the right column) as its raw material, and burnt.
(2) Raw material contains 20% or more recycled material by weight (total weight when using multiple materials). However, when counting the weight of recycled material, it may not include scraps from the same factory that is usually used.
(3) According to Environmental Standards for Soil Contamination (August 23, 1991, Ministry of Environment Notice No. 46), there are no problems concerning the elution of toxic material such as heavy metals, etc., in the one that the product or the burned product of the reworked material used was crushed to 2mm or less.

Factors for Consideration
According to Regulation for Control of Soil Contamination (May 29, 2002, Regulation No. 53) , there are no problems concerning the content of toxic material such as heavy metals, etc., in the one that the product or the burned product of the reworked material used was crushed to 2 mm or less.

Table
<table>
<tr><td>Category of recycled material to be used as raw material</td><td>Preprocessing method</td></tr>
<tr><td>Quarry or kiln waste</td><td rowspan="13">No preprocessing required</td></tr>
<tr><td>Inorganic silica sand</td></tr>
<tr><td>Steel slag</td></tr>
<tr><td>Non-ferrous slag</td></tr>
<tr><td>Foundry sand</td></tr>
<tr><td>Pottery shards</td></tr>
<tr><td>Coal ash</td></tr>
<tr><td>Building material waste</td></tr>
<tr><td>Waste glass (does not include colorless and brown glass bottles)</td></tr>
<tr><td>Paper sludge</td></tr>
<tr><td>Aluminum sludge</td></tr>
<tr><td>Polishing sand sludge</td></tr>
<tr><td>Stone chips</td></tr>
<tr><td>Municipal waste ashes</td><td>Convert to molten slag</td></tr>
<tr><td>Sewage sludge</td><td>Convert to ashes or molten slag</td></tr>
<tr><td>Waterworks sludge</td><td rowspan="2">No preprocessing required</td></tr>
<tr><td>Sludge from lakes, etc.</td></tr>
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<table>
<tr>
<td></td>
<td>Pavement block products using recycled material (precast unreinforced concrete products)</td>
<td>
Evaluation Criteria
(1) Uses recycled material (material such as those included in the left column of Table below, and preprocessed where indicated in the right column) as its raw material.
(2) Raw material contains 20% or more recycled material by weight (total weight when using multiple materials). In cases where it is necessary to increase the ratio of aggregates in order to maintain water permeability, raw material must contain 15% or more recycled material by weight. However, when counting the weight of recycled material, it may not include scraps from the same factory that is usually used.
(3) There are no problems concerning content and elution of toxic material such as heavy metals in recycled material.

Table
<table>
<tr><td>Category of recycled material to be used as raw material</td><td>Preprocessing method</td></tr>
<tr><td>Municipal waste ashes</td><td rowspan="2">Convert to molten slag</td></tr>
<tr><td>Sewage sludge</td></tr>
</table>
</td>
</tr>
</table>

Note:
Evaluation Criteria (3) is to be determined in accordance with the standards designated in JIS A 5031 (Solidified slag aggregate for concrete derived from melting and solidification of general waste material, sewage discharge, or their incinerated ash.)

Gardening material	Bark compost	**Evaluation Criteria** Meets the following criteria, uses as raw material 50% or more by dry weight of tree bark that has peeled off from the tree component, and uses organic material including excrement of domestic animals, animal or vegetable food residue, or wood based scrap material as other raw material with the exception of material used for fermentation assistance: • Percentage of organic material (dry): no less than 70% • Carbon to nitrogen ratio (C/N ratio): no more than 35 • Cation exchange capacity [CEC] (dry): no less than 70meq/100g • pH: 5.5~7.5 • Water content: 55～65% • Result of young plant test: no abnormalities including growth impediment is recognized • Nitrogen content [N] (actual): no less than 0.5% • Phosphoric acid content [P2O5] (actual): no less than 0.2% • Potassium content [K2O] (actual): no less than 0.1%
	Fermented compost using sewage sludge (Sewage sludge compost)	**Evaluation Criteria** Meets the following criteria, uses as raw material 25% or more by weight of sewage sludge (dehydrated sludge based), and uses organic material including excrement of domestic animals, animal or vegetable food residue, or wood based scrap material as other raw material with the exception of non-organic soil conditioner. • Percentage of organic material (dry): no less than 35% • Carbon to nitrogen ratio (C/N ratio): no more than 20 • pH: no more than 8.5 • Water content: no more than 50% • Nitrogen content [N] (actual): no less than 0.8% • Phosphoric acid content [P2O5] (actual): no less than 1.0% • Alkaline content (actual): no more than 15%(This does not apply when used for the purpose of correcting the acidity of the soil.)

Note:

1. ***Fermented compost using sewage sludge*** includes those used as a soil conditioner.
2. Material that satisfy the official standards for regular fertilizer (February 22, 1986, Ministry of Forestry, Agriculture and Fisheries Notice No. 284) in accordance with Regulations for Fertilizer Control Article 3 and Article 25 (proviso).

Road illuminations	Environment-ally friendly road illuminations	**Evaluation Criteria** Road illumination equipment utilizes high pressure sodium lamp or ceramic metal halide lamp, whose electricity consumption is over 45% lower than illumination equipment that uses mercury lamp. **Factors for Consideration** Appropriate light source is selected, taking into consideration the color rendition and effect of light desired for the site where the equipment is to be used.
Central divider block	Central divider block using recycled plastic	**Evaluation Criteria** Raw material contains 70% or more recycled plastic by weight. **Factors for Consideration** A system exists for collection and reuse after removal.

Notes:

1.Recycled plastic denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.)

2. As for ***Central divider block using recycled plastic***, material that meet the standard of JIS A 9401(Recycled plastics median strip block) fills this criteria.

Tiles	Porcelain tile	**Evaluation Criteria** (1) Uses recycled material (material such as those included in the left column of Table below, and preprocessed where indicated in the right column) as its raw material. (2) Raw material contains 20% or more recycled material by weight (total weight when using multiple materials). However, when counting the weight of recycled material, it may not include scraps from the same factory that is usually used. (3)According to Environmental Standards for Soil Contamination (August 23, 1991, Ministry of Environment Notice No. 46), there are no problems concerning the elution of toxic material such as heavy metals, etc., in the one that the product or the burned product of the reworked material used was crushed to 2 mm or less. **Factors for Consideration** According to Regulation for Control of Soil Contamination (May 29, 2002, Regulation No. 53) , there are no problems concerning the content of toxic material such as heavy metals, etc., in the one that the product or

		the burned product of the reworked material used was crushed to 2 mm or less.

Table Insert

Category of recycled material to be used as raw material	Preprocessing Method
Quarry or kiln waste Inorganic silica sand Steel slag Non-ferrous slag Foundry sand Pottery shards Coal ash Waste plastic Building material waste Waste rubber Waste glass (does not include colorless and brown glass bottles) Paper sludge Aluminum sludge Polishing sand sludge Stone chips	No preprocessing required
Municipal waste ashes	Convert to molten slag
Sewage sludge	Convert to ashes or molten slag
Waterworks sludge	No preprocessing required
Sludge from lakes, etc.	

Item Type	Item Name	Evaluation Criteria, etc.
Doors and windows	Heat insulating sash, doors	**Evaluation Criteria** Doors and windows that prevent loss of heat, while meeting any of the following criteria: • Sash using multiple glasses. • Double sash. • Door using insulation material or other effective method of insulation. **Factors for Consideration** Using insulation in the sash frame and the shoji or the measures of effective insulation anything like this must be taken, or well-insulated material is used.

Lumber, etc.	Lumber	**Evaluation Criteria** (1) Lumber from thinning and left over forest wood must have a small diameter. (2) For cases other than (1), the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. **Factors for Consideration** Lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. Lumber obtained from thinning, left over forest wood, and lumber with a small diameter will not be included.
	Glued laminated timber Plywood Laminated veneer lumber	**Evaluation Criteria** (1) Lumber from thinning, glued laminated timber, left over wood blocks from wood processing factories etc., left over forest wood must contain 10% or more by volume of those with a small diameter. For lumber other than described above, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For cases other than (1), the pulpwood used, with the exception of lumber obtained from thinning, left over forest wood, and lumber with a small diameter, is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (3) For material used to finish the interior of living spaces, average formaldehyde discharge may not exceed 0.3mg/L, maximum discharge may not exceed 0.4mg/L. **Factors for Consideration** Lumber that is used as the raw material (with the exception of lumber obtained from thinning, left over forest wood, and lumber with a small diameter) is to be obtained from a forest that is conducting a sustainable operation.

Note:

1. ***Lumber, glued laminated timber, plywood,*** and ***laminated veneer lumber*** under consideration in the evaluation criteria of this section (referred to as ***lumber, etc***.) are to be used for carpentry in buildings.
2. Evaluation Criteria (2) for ***lumber, etc.*** is to be applicable only in cases where restrictions exist on either function or demand.
3. Measurement for formaldehyde discharge should be performed in accordance with Japan Agricultural Standards.
4. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with

the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006, that the said contract has been completed before April 1, 2006.

Flooring	Flooring	**Evaluation Criteria** (1) Uses lumber from thinning, glued laminated timber, left over wood blocks from wood processing factories etc., left over forest wood of those with a small diameter. Lumber other than described above is to be obtained from pulpwood that is in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For cases other than (1), the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (3) For material used to finish the interior of living spaces, average formaldehyde discharge may not exceed 0.3mg/L, maximum discharge may not exceed 0.4mg/L. **Factors for Consideration** Lumber that is used as the raw material (with the exception of lumber obtained from thinning, left over forest wood, and lumber with a small diameter) is to be obtained from a forest that is conducting a sustainable operation.

Note:

1. ***Flooring*** under consideration in the evaluation criteria of this section are to be used for carpentry in buildings.
2. Evaluation Criteria (2) for flooring is to be applicable only in cases where restrictions exist on either function or demand.
3. Measurement for formaldehyde discharge should be performed in accordance with Japan Agricultural Standards.
4. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.

Reconstituted wood boards	Particle board Fiberboard Wood-type cement board	**Evaluation Criteria** (1) At least 50% (by weight) of the material consists of scraps from plywood and lumber mills, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and small-diameter logs (including lumber obtained from thinning), or plant fibers. The weight of glue, adhesives and binding agents used to hold together wood compounds (such as phenol adhesives used in particle board, and cements used in wood-based cement board) may be left out of the 50% by weight calculation, so long as these agents make up no more than 20% of the total volume of the compound material under consideration. (2) For lumber other than scraps from plywood and lumber mills, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and small-diameter logs (including lumber obtained from thinning), the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin (3) For material used to finish the interior of living spaces, formaldehyde discharge may not exceed 0.3mg/l, maximum discharge may not exceed 0.4 mg/l. **Factors for Consideration** Lumber other than scraps from plywood and lumber mills, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and small-diameter logs (including lumber obtained from thinning), is to be obtained from a forest that is conducting a sustainable operation.

Note:

1. Measurement for formaldehyde discharge should be performed in accordance with JIS A 1460.
2. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
   In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1, 2006 that the said contract has been completed before April 1, 2006.
3. As for ***Particle board*** and ***Fiberboard,*** concerning Evaluation Criteria(3), materials

that meet the standard of F four stars based on JIS A 5908 and A 5905 fill this criteria.

Vinyl floor covering	Vinyl floor covering	**Evaluation Criteria** Total weight of recycled vinyl resin material used is no less than 15% of total weight. **Factors for Consideration** A system for collection and reuse/recycling of material left over from construction work is considered.

Note:

Types of vinyl flooring material determined by JIS A 5705 (Vinyl floor covering) that is applicable to symbol KS is not to be included in ***vinyl floor covering*** discussed in Evaluation Criteria.

Insulation	Insulation	**Evaluation Criteria** Material that prevents loss of heat through the outer walls of buildings, and meet the below criteria. (1) Fluorocarbons are not used. (2) Uses recycled material, or may be recycled after use. **Factors for Consideration** As for extruded polystyrene foam insulator, the glass-wool insulation and the rock wool heat insulation, the numerical value of the heat loss prevention performance must be small as small as possible.

Note:

1. ***Fluorocarbons*** are the materials defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001).
2. Definition of the heat loss prevention performance and the measuring method are according to "Criteria of judgment such as manufacturing entrepreneurs of materials for building construction for heat loss prevention concerning improvement of performance of insulation" (Ministry of Economy, Trade and Industry Act No.270 of December, 2013).

Lighting fittings	Lighting control system	**Evaluation Criteria** Comprised of Hf fluorescent lighting equipment capable of continuous lighting, LED lighting equipment and lighting control system that controls the equipment. It must possess functions for the control and correction of initial luminance and the control of natural light.
Transformers	Transformers	**Evaluation Criteria** Energy consumption efficiency shall not exceed the amount determined by the appropriate formula for each category.

		Factors for Consideration Load factor during actual operation is taken into consideration.

Note:

Transformers under consideration in the evaluation criteria of this section refers to items whose rated primary voltage exceeds 600V and is 7000V or less, and is used for an alternating current circuit. Items that meet any of the following criteria will not be considered as transformers.

1. Items that use gas as insulating material.
2. Items that use H type insulating material.
3. Scott connection transformers.
4. Items equipped with more than 3 round rotors.
5. Pole transformers.
6. Single phase transformers with rated capacity of 5kVA or less, or over 500kVA.
7. Triple phase transformers with rated capacity of 10kVA or less, or over 2000kVA.
8. Triple phase transformers using resin insulation material used to transform triple phase alternating current to single phase and triple phased alternating current.
9. Items whose rated secondary voltage of less than 100V or more than 600V.
10. Wind cooled, or water cooled items.

Table: Standard Energy Consumption Efficiency for Transformers

Category				Formula for calculating standard energy consumption efficiency
Type of transformer	Phase number	Rated frequency	Rated capacity	
Oil-filled transformers	Single phase	50 Hz		$E=11.2S^{0.732}$
		60 Hz		$E=11.1S^{0.725}$
	Triple phase	50 Hz	500 kVA or less	$E=16.6S^{0.696}$
			Over 500 kVA	$E=11.1S^{0.809}$
		60 Hz	500 kVA or less	$E=17.3S^{0.678}$
			Over 500 kVA	$E=11.7S^{0.790}$
Molded transformers	Single phase	50 Hz		$E=16.9S^{0.674}$
		60 Hz		$E=15.2S^{0.691}$
	Triple phase	50 Hz	500 kVA or less	$E=23.9S^{0.659}$
			Over 500 kVA	$E=22.7S^{0.718}$
		60 Hz	500 kVA or less	$E=22.3S^{0.674}$
			Over 500 kVA	$E=19.4S^{0.737}$

Note:

1. ***Oil-filled transformers*** refers to items that use insulation oil as the insulating material.
2. ***Molded transformers*** refers to item that uses resin insulation material.
3. E and S stand for the following:
   E: Standard energy consumption efficiency (unit: W)
   S: Rated capacity (unit: kVA)
4. The table designation will be applied correspondingly to those items not used in the

standard specification conditions designated in JIS C 4304 and C 4306 and Japan Electrical Industry Standards 1500 and 1501. In such cases, the formula for calculating standard energy consumption efficiency listed in the right column of the chart will be modified by multiplying the right side of the formula by 1.10 (for mold transformers, multiply by 1.05).

5. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," in Ministry of Economy, Trade and Industry notification No. 71 (March 30, 2012), based on the Law Concerning the Rational Use of Energy.

Air conditioning units	Cold and hot water absorption air conditioning unit	**Evaluation Criteria** Performance factor for cooling is no less than what is designated in Table.

Note:

1. Evaluation criteria for ***Cold and hot water absorption air conditioning unit*** under consideration in the evaluation criteria in this section only applies to units whose cooling capacity is no less than 25kW.
2. Performance factor for cold and hot water absorption air conditioning unit shall be calculated in accordance with JIS B 8622.

Table: Coefficient of Performance for Cooling

Category	Coefficient of performance
Cooling capacity is up to 186kW	1.15
Cooling capacity is over 186kW	1.20

Air conditioning units	Ice thermal storage air conditioners	**Evaluation Criteria** (1) Includes an ice thermal storage tank. (2) Cooling material does not use material capable of destroying the ozone layer. (3) Coefficient of performance for cooling is no less than what is specified in Table 3.

Note:

1. ***Ice thermal storage air conditioner*** denotes an ice thermal storage unit or an ice thermal storage packaged air conditioner.
2. Evaluation criteria for ***Ice thermal storage air conditioner*** apply to ice thermal storage units whose non-thermal storage equivalent cooling capacity exceeds 28kW, or ice thermal storage packaged air conditioners whose rated thermal storage cooling capacity exceeds 28kW.
3. Coefficient of performance is calculated with the below formula using 10 hours as the daytime heat source unit operating duration.

a. Ice thermal storage unit

Coefficient of performance =Rated daily cooling capacity (kW.h) / Rated electricity consumption for thermal storage (kW.h) + Electricity consumption for daytime cooling operation of heat source unit (kW.h)

b. Ice thermal storage packaged air conditioner

Coefficient of performance=Daily cooling efficiency using thermal storage

4. ***Non-thermal storage equivalent cooling capacity*** denotes the peak heat load with the average head load factor per one hour of cooling (the ratio of average load when the load factor per hour of peak load is 100%) at 85%.
5. ***Rated thermal storage cooling capacity*** denotes the amount of heat load that the ice thermal storage packaged air conditioner removes from a room by primarily using thermal storage in accordance with the rated cooling temperature conditions indicated on Table 1.

Table 1 : Temperature conditions Unit : degrees C

		Temperature condition inside entryway		Exterior temperature condition	
		Dry bulb temperature	Wet bulb temperature	Dry bulb temperature	Wet bulb temperature
Air conditioning	Rated cooling	27	19	35	—
	Thermal storage for rated cooling	—	—	25	—

6. ***Rated daily cooling capacity*** denotes the total daily heat value that may be supplied to a secondary source with the temperature of cold water outlet at 7 degrees C. The amount is calculated by adding the net effective heat storage capacity derived from the heat value stored inside the heat storage tank, and the heat value cooled by the daytime operation of heat source equipment.
7. ***Rated electricity consumption for thermal storage*** denotes the sum of electricity consumed (including electricity consumed by primary supplementary equipment such as a brine pump) in order to reach standard thermal storage capacity in accordance with the thermal storage temperature conditions indicated on Table 2.

Table 2 :Temperature conditions Unit : degrees C

	Exterior temperature condition	
	Dry bulb temperature	Wet bulb temperature

Air condition-ing	Rated cooling	35	—
	Thermal storage for rated cooling	25	—

8. ***Electricity consumption for daytime cooling operation of heat source unit*** denotes the sum of electricity consumed when heat source and thermal storage tank is connected in series and operated in accordance with the rated cooling temperature condition indicated on Table 2.
9. ***Daily cooling efficiency using thermal storage*** denotes the result of daily thermal storage cooling capacity divided by electricity consumed by daily thermal storage cooling.
10. ***Daily thermal storage cooling capacity*** denotes the amount of heat removed from the room during the time that an ice heat storage packaged air conditioner is operated under stable conditions for thermal storage for rated cooling indicated on Table 1 for a maximum of 10 hours, and then operated using thermal storage for the duration of thermal storage cooling period.
11. ***Electricity consumed by daily thermal storage cooling*** denotes electricity consumed during the time that an ice heat storage packaged air conditioner is operated under stable conditions for thermal storage for rated cooling indicated on Table 1 for a maximum of 10 hours, and then operated using thermal storage for the duration of thermal storage cooling period.

Table 3 : Coefficient of Performance for Cooling

Category	Coefficient of performance
ice thermal storage unit	2.2
ice thermal packaged air conditioner	3.0

Air condition-ing units	Gas engine heat pump air conditioner	**Evaluation Criteria** (1) Cooling medium does not include material capable of destroying the ozone layer. (2) Annual Performance Factor or Coefficient of Performance does not fall below the numbers listed in Tables 1 and 2.

Note:

1.***Gas engine heat pump air conditioner*** under consideration in the evaluation criteria includes units whose rated cooling capacity is 28kW or more.

Table 1 : JIS Applicable Unit Types

Category	Annual Performance Factor (APF)

Cooling capacity is 28kW or higher and lower than 35kW	1.67 or higher
Cooling capacity is 35kW or higher	1.86 or higher

1. The calculation of Annual Performance Factor (APF) will be executed in accordance to JIS B 8627-1.

Table 2 : Unit Types not applicable to JIS

Category	Coefficient of performance for primary energy conversion (COP)
Cooling capacity is 28 kW or higher and lower than 67kW	1.33 or higher
Cooling capacity is 67 kW or higher	1.23 or higher

1. Coefficient of Performance for primary energy conversion is calculated using the following formula. For units that can be used with rated frequency of both 50 and 60 Hertz, the smaller of the numbers derived from calculations using both numbers will apply.

COP=(Cc/(Egc+Eec)+Ch/(Egh+Eeh))/2

COP : Coefficient of performance for primary energy conversion
Cc : Standard cooling capacity(unit kW)
Egc : Cooling gas consumption(unit kW)
Eec : Amount of primary energy(unit kW)calculated by substituting 1kWh cooling electricity consumption(unit kW)with 9,760kJ.
Ch : Standard heating capacity(unit kW)
Egh : Heating gas consumption(unit kW)
Eeh : Amount of primary energy(unit kW)calculated by substituting 1kWh heating electricity consumption(unit kW)with 9,760kJ.

2. Standard cooling capacity, cooling gas consumption, standard heating capacity, and heating gas consumption are evaluated in accordance with methods designated by JIS B 8627-2 or B 8627-3.
3. Effective electricity consumption of the outdoor unit will be used for cooling electricity consumption and heating electricity consumption.

Air conditioning units	Fan	**Evaluation Criteria** Uses premium efficiency motor.

Note:

1. ***Premium efficiency motor*** is to be JIS C 4213 (Low-voltage three-phase squirrel-cage induction motors-Low-voltage Top Runner Motor).
2. Range of applicability should include centrifugal fan for air conditioning and ventilation that uses three-tiered induction motor with nominal voltage of 600V or lower. This does not include direct style induction motor and smoke ventilator.

Air conditioning units	Pump	**Evaluation Criteria** Uses high efficiency motor.

Note:

1. ***Premium efficiency motor*** is to be JIS C 4213 (Low-voltage three-phase squirrel-cage induction motors-Low-voltage Top Runner Motor).
2. Range of applicability should include air conditioning pump that uses three-tired induction motor with nominal voltage of 600V or lower, and in particular, a centrifugal pump whose motor is directly connected to the pump.

Plumbing material	Recycle unplasticized polyvinyl chloride pipes for sewage or vent	**Evaluation Criteria** The item is recycled unplasticized polyvinyl chloride pipes for sewage or vent and must use vinyl chloride derived from used unplasticized polyvinyl chloride pipes, and the use ratio must not fall below the numbers listed in Table. **Factors for Consideration** A system for collection and reuse/recycling after the useful life of the item is considered.

Note:

1. Evaluation criteria for ***Recycle unplasticized polyvinyl chloride for sewage or vent*** applies to the no pressure piping only when used unplasticized polyvinyl chloride pipes are used for the indoor sewage and vent, and for the outdoor sewage in facilities for drainage in the site.
2. ***Recycle unplasticized polyvinyl chloride pipes*** *are* to be recycle unplasticized polyvinyl chloride pipes or fittings depends on the definition of post consumer by JIS Q 14021 7.8.1.1a) 2).

Table: Ratio by Weight

Classification of pipe	Ratio by weight
Three layer pipes	30%
Single layer pipes	80%

1. Three layer pipes are to be JIS K 9797 and JIS K 9798.
2. Single layer pipes are to be recycled unplasticized polyvinyl chloride pipes used as material and filled the standard of JIS K 6741(it should be able to be distinguished easily to use recycled unplasticized polyvinyl chloride pipes and should be the one that can be confirmed by the document) and AS58.

Plumbing fixtures	Automatic faucet	**Evaluation Criteria** By electric control system, water comes out in the automatic operation when the hand is close to the faucet without touch and water stops in the automatic operation when the hand is kept away.

	Toilet and urinal equipped with automatic flushing system	**Evaluation Criteria** Amount of water flushed in one procedure does not exceed 4 liters. Amount of water can be controlled depending on usage.
	Western style toilets	**Evaluation Criteria** Amount of water flushed in one procedure does not exceed 8.5 liters.

Note:
Automatic faucet in the evaluation criteria of this section is the one to be used for wash and toiletry of public washroom. It must be prompt still water after the hand is kept away to stop water.

Concrete form	Form utilizing recycled material	**Evaluation Criteria** Form utilizing recycled material is to be comprised at least 50% by weight of recycled material (those that uses those listed in Attached Table as raw material), and is being recycled again after use. Attached Table Category of material that can be used as raw material for recycling Recycled plastic Pulp from recycled paper **Factors for Consideration** Form utilizing recycled material must have been confirmed for efficiency in construction and economy (material cost, reuseability, cost of collection, recycling, etc.) that is equivalent to non-recycled examples.

Note:
1. Forms used as a part of structural components including precast forms, and ornamental molds are not to be included in this category.
2. ***Recycled plastic*** denotes part or all of plastic once used as a part of a useful product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles (This excludes, however, plastic that has been recycled in the process of manufacturing the product.).

Concrete form	Plywood form	**Evaluation Criteria** Fulfill one of the following; (1) Used lumbers contain not less than 10% by volume of any of followings; lumber from timber thinning, left over wood blocks such as wood waste from timber mills or laminated timber factories, left over wood in the forest, timber with a small diameter. Used lumbers other than described above are to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For the cases other than (1), used lumbers other than lumber from timber thinning, left over wood blocks such as wood waste from timber mills or laminated timber factories, left over wood in the forest, timber with a small diameter, are to be in compliance with the regulations concerning forestry in its country or geographical area of origin. **Factors for Consideration** Used lumbers other than lumber from timber thinning, left over wood blocks such as wood waste from timber mills or laminated timber factories, left over wood in the forest, timber with a small diameter are to be obtained from a forest in which sustainable operation is conducted.

Note:

1. Evaluation Criteria (2) for ***Plywood form*** is to be applicable only under the restrictions of either function or supply.
2. Confirm that the contents shown in Note3 are displayed on the surface of the plywood form when confirming the legality of lumbers and the sustainability of the forest where the lumbers are produced from.
3. It is necessary to display the following content on the surface of the plywood form. Those contents are based on Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".
    a. The words or certificated marks which assure the use of lumbers that are produced through appropriate procedure described in Evaluation Criteria (1) or (2) in this section.
    b. Number of accreditation or certification, and the name of certification organization.

    Those contents are displayed clearly in the area which can easily be found on the surface of each plywood form. As for plywood for processed surface plywood form which are coated by paint or overlay even in the back side, those contents are clearly displayed which can easily be found on the side surface of plywood if it is difficult to display on the surface.
4. As for Evaluation Criteria (1) and (2), transition period is applied in the fiscal year 2015. In this period, though plywood forms that meet evaluation criteria are tried to be procured, the plywood forms which don't have the display of Note 3 are excluded from the scope of this Evaluation Criteria.

Table 3 : **Construction Machines**

<table>
<tr><th>Item Name</th><th>Evaluation Criteria, etc.</th></tr>
<tr><td>Low-emission construction machines</td><td>
Evaluation Criteria
Low-emission construction machines in attached Tables 1 and 2, emissions and soot from on-board engines do not exceed the ratio of secondary standard or less described below.

Attached Table 1: Construction Machines for Tunnel
<table>
<tr><th>Machine Type</th><th>Application</th></tr>
<tr><td>Back hoes</td><td>Diesel engine output :30kW or more less than 560 kW (include with a heavy weight breaker)</td></tr>
<tr><td>Wheel loaders
Crawler loaders</td><td>Diesel engine output :30kW or more less than 560 kW</td></tr>
<tr><td>Dump trucks</td><td>Diesel engine output :30kW or more less than 560 kW. However, exclude the one to have received the delivery of an effective motor vehicle inspection certificate.</td></tr>
<tr><td>Mixer trucks</td><td>Diesel engine output :30kW or more less than 560 kW. However exclude the one to have received the delivery of an effective motor vehicle inspection certificate.</td></tr>
</table>
Attached Table 2:Construction Machines for General Construction
<table>
<tr><th>Machine Type</th><th>Application</th></tr>
<tr><td>Back hoes</td><td>Diesel engine output :8kW or more less than 560 kW</td></tr>
<tr><td>Wheel loaders</td><td>Diesel engine output :8kW or more less than 560 kW</td></tr>
<tr><td>Bulldozers</td><td>Diesel engine output :8kW or more less than 560 kW</td></tr>
</table>
The Ratio of Secondary Standard
<table>
<tr><th>Substance (unit)
Output classification</th><th>HC (g/kWh)</th><th>NOx (g/kWh)</th><th>CO (g/kWh)</th><th>PM (g/kWh)</th><th>Soot (%)</th></tr>
<tr><td>8kW or more less than 19kW</td><td>1.5</td><td>9</td><td>5</td><td>0.8</td><td>40</td></tr>
<tr><td>19kW or more less than 37kW</td><td>1.5</td><td>8</td><td>5</td><td>0.8</td><td>40</td></tr>
<tr><td>37kW or more less than 75kW</td><td>1.3</td><td>7</td><td>5</td><td>0.4</td><td>40</td></tr>
<tr><td>75kW or more less than 130kW</td><td>1</td><td>6</td><td>5</td><td>0.3</td><td>40</td></tr>
<tr><td>130kW or more less than 560kW</td><td>1</td><td>6</td><td>3.5</td><td>0.2</td><td>40</td></tr>
</table>
</td></tr>
</table>

1. The measuring method is according to ***Specified Procedure for Low-emission Construction Machines*** (October 8, 1991, No.249, issued by The Ministry of Construction, Construction and Economic Bureau, Construction Equipment Division) additionally provided.
2. The soot standard for tunnel construction machine is 1/5 or less of the above standard.

Low-emission construction machines in attached Tables 3 and 4, emissions and soot from on-board engines do not exceed the ratio of primary standard or less described below

Attached Table 3: Construction Machines for Tunnel

Machine Type	Application
Drill Jumbo	Diesel engine output :30kW or more less than 260 kW(40.8PS or more less than 353PS)
Concrete spraying machine	Diesel engine output :30kW or more less than 260 kW(40.8PS or more less than 353PS)

Attached Table 4: Construction Machines for General Construction

Machine Type	Application
Power generators	Diesel engine output :7.5kW or more less than 260 kW(10.2PS or more less than 353PS), transportable(including double as machine of welding)
Air compressors	Diesel engine output :7.5kW or more less than 260 kW(10.2PS or more less than 353PS), transportable
Hydraulic units	Diesel engine output :7.5kW or more less than 260 kW(10.2PS or more less than 353PS), independent with machine for foundation work
Rollers	Diesel engine output :7.5kW or more less than 260 kW(10.2PS or more less than 353PS), Road rollers, Tyre rollers, Vibration rollers
Wheel Cranes	Diesel engine output :7.5kW or more less than 260 kW(10.2PS or more less than 353PS), rough terrain crane

The Ratio of Primary Standard

Substance (unit) / Output classification	HC (g/kWh)	NOx (g/kWh)	CO (g/kWh)	Soot (%)
7.5kW or more less than 15kW	2.4	12.4	5.7	50
15kW or more less than 30kW	1.9	10.4	5.7	50
30kW or more less than 272kW	1.3	9.2	5	50

1. The measuring method is according to ***Specified Procedure for Low-emission Construction Machines*** (October 8, 1991, No.249, issued by The Ministry of Construction, Construction and Economic Bureau, Construction Equipment Division) additionally provided.
2. The soot standard for tunnel construction machine is 1/5 or less of the above standard.

Note: In case of using the construction machine which specified as a target for Act on Regulation, Etc. of Emissions from Non-road Special Motor Vehicles (Act No. 51 of May 25, 2005), it is necessary to use the machine that meets the technological standard of this law.

Low-noise construction machines

Evaluation Criteria
Emissions and soot from on-board engines do not exceed levels in attached Table.

Attached Table.

Machine Type	Machine Output (kW)	Noise Standard (dB)
Bulldozers	P < 55	102
	55 ≤ P <103	105
	103 ≤ P	105
Back hoes	P < 55	99
	55 ≤ P <103	104
	103 ≤ P < 206	106
	206 ≤ P	106
Drag lines Clamshells	P < 55	100
	55 ≤ P <103	104
	103 ≤ P < 206	107
	206 ≤ P	107
Front-end loaders	P < 55	102
	55 ≤ P <103	104
	103 ≤ P	107
Crawler cranes Track cranes Wheel cranes	P < 55	100
	55 ≤ P <103	103
	103 ≤ P < 206	107
	206 ≤ P	107
Vibro-hammers		107

Hydraulic pile drivers Hydraulic steel pipe driver/extractors Hydraulic pile extractors	P < 55 55 ≤ P <103 103 ≤ P	98 102 104
Earth augers	P < 55 55 ≤ P <103 103 ≤ P	100 104 107
All-casing excavators	P < 55 55 ≤ P <103 103 ≤ P < 206 206 ≤ P	100 104 105 107
Earth drills	P < 55 55 ≤ P <103 103 ≤ P	100 104 107
Concrete breakers		106
Load rollers Tire rollers Vibration rollers	P < 55 55 ≤ P	101 104
Concrete pumps (vehicle)	P < 55 55 ≤ P <103 103 ≤ P	100 103 107
Concrete conditioners	P < 55 55 ≤ P <103 103 ≤ P < 206 206 ≤ P	99 103 106 107
Asphalt finishers	P < 55 55 ≤ P <103 103 ≤ P	101 105 107
Concrete cutters		106
Air compressors	P < 55 55 ≤ P	101 105
Power generators	P < 55 55 ≤ P	98 102

Table 4 : Construction Methods

Item Type	Item Name	Evaluation Criteria, etc.
Effective usage of soil resulting from construction	Effective usage of low quality soil	**Evaluation Criteria** The method decreases the amount of soil resulting from construction to be transported off site by using clayey low quality soil resulting from construction at the same construction site.
Recycling treatment of construction sludge	Recycling treatment of construction sludge	**Evaluation Criteria** (1) Method for reusing construction sludge obtained from a construction sites within the same site by recycling the sludge into banking material and treated fluid soil. (2) Liquation of hazardous material such as heavy metal, etc., must comply with measures against soil contamination (Law No. 53 dated May 29, 2002) and the environmental standards for soil contamination (Notification No.46 of the Ministry of Environment dated August 23, 1991)
Recycling treatment of concrete masses	Recycling treatment of concrete masses	**Evaluation Criteria** Method for reusing concrete masses obtained from a construction site within the same site by recycling the concrete masses into concrete or aggregate.
Pavement (surface)	Road surface recycling method	**Evaluation Criteria** Method for replacing the road surface on site or the vicinity of a site concerned by pulverizing the existing asphalt pavement, adding new asphalt compound or additives as needed, and mixing and compacting.
Pavement (roadbed)	Roadbed recycling method	**Evaluation Criteria** Method for replacing the road surface on site by pulverizing and mixing the existing roadbed and asphalt or concrete pavement, and stabilizing the resulting material.

Note:
To be used on roads with the thickness of the layer of an asphalt mixture of 10cm or less.

Slope surface greening method	Slope surface greening method using thinning wood or soil obtained from construction process	**Evaluation Criteria** Method for effectively using thinning wood or soil obtained from construction process at a construction site within the same site. However, the amount used which added together felling material and the construction generating ground should occupy 70% or more by the capacity ratio of the growth base material except the water added there.

Sheathing method	Soil cement pillar line wall method of reducing mad	**Evaluation Criteria** The construction method to which the mud that generates the mud partially of the cement system solidification medicine by reducing the injection rate of recycling or the cement system solidification medicine along with construction can be decreased.

Note:
Soil cement pillar line wall method of mud reducing in the evaluation criteria of this section is to be used for temporary construction.

Table 5 : Other

Item Type	Item Name	Evaluation Criteria, etc.
High performance paving material	Porous pavement	**Evaluation Criteria** Paving material that is capable of allowing rain water to permeate through the road surface to be discarded to drain pipes, and reducing traffic noise.

Note:
To be used when reduction of traffic noise is needed.

High performance paving material	Permeable pavement	**Evaluation Criteria** Paving material that is capable of allowing rain water to permeate through the road surface.

Note:
To be used on roads without automobile traffic, such as pedestrian paths that require rainwater to permeate through the surface.

Greening of rooftops	Greening of rooftops	**Evaluation Criteria** (1) Healthy growth of plants as well a bed for growth of plants. (2) Contributes to improvement of the improvements by alleviating heat island phenomenon, etc. **Factors for Consideration** (1) Uses plants suited for rooftops. (2) Structure must take into consideration the use of rain water for sprinklers, as well as the securing of water and drainage for the plant beds.

Note:
To be placed on the roof of buildings, etc.

22. Services

22-1. Energy Conservation Diagnosis

(1) Items and Evaluation Criteria

Energy conservation diagnosis	**Evaluation Criteria** Persons with a technical qualification listed in Table 1, or persons acknowledged to have skills equivalent to such qualification, investigate and analyze the running status, operational manner and the amount of the energy use of equipment such as public office buildings. Additionally, based on the results of those investigation and analysis, proposal to improve energy conservation, such as introducing new equipment or facilities, refurbishment or operational improvement, including those listed in Table 2, are made.

Table 1

First class registered architects
First class registered construction execution managing engineers
First class registered electrical engineering execution managing engineers
First class registered piping works execution managing engineers
Engineers (construction, electrical/computer, mechanical, sanitation, environmental)
Energy management professionals
Building engineers
Electrical chief engineer

Table 2

History of energy consumption, actual lighting, heating, cooling, and water use costs, and state of facility maintenance and operation over the past 3 years.
Performances or estimates of energy consumption by the facility and equipment, with the basis for the estimates.
Estimates of the amount of energy conservation by the installation of new facilities and equipment, and refurbishment, with the basis of estimates.
Estimates of the amount of energy conservation by the operational improvement items, with the basis of estimates.
Estimated funds necessary for introduction of new equipment with the basis for the estimates.

(2) Target Setting Guideline

Number of energy conservation diagnosis contracts to be procured for the fiscal year.
Note: facilities which are eligible to undergo this diagnosis shall be concretely defined each fiscal year.

22-2. Printing

(1) Items and Evaluation Criteria

Printing	**Evaluation Criteria** (1) <Common Criteria>Paper that conforms to the evaluation criteria for printing paper (refer to ***Paper*** section). Cover page of bounded material will be excluded and if virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (2) Material that will interfere with the recycle for paper indicated in Table 1 Rank B, C and D are not used. When they must be used for the usage and purpose of the printed material, it is necessary to note the part in which the material is used as well as method of discarding or recycling. (3) Recycle compliancy is indicated on the printed material. (4) At the each stage of work the printing, the measures for the environmental consideration shown in Table 2 shall be taken. **<Individual Criteria>** (1) Offset Printing a. Inks contain vegetable based oil and inks whose aromatic compounds are less than 1% must be used. b. Chemical safety of inks is confirmed. (2) Digital Printing a. As for xerographic (Limited to dry toner method.), the toner must be used that meets the evaluation criteria lies chemical safety of the toner cartridge (Refer to "Toner cartridge"). b. As for xerographic (Limited to wet toner method.) and as for inkjet method, chemical safety of toner and inks is confirmed. **Factors for Consideration** (1) Considering the usage and the purpose of printed matter, it must be lightened as much as possible. (2) Waste products are to be minimized through the promotion of digitization (employment of DTP, CTP, and DDCP methods, etc.). (3) Control of volatile organic material (VOC) is taken into consideration. (4) Materials and parts such as used ink can, containers of inks or toners, and ink photosensitive drums use again or will be recycled.

	(5) Use of the material that may produce harmful material for surface processing of cover page, etc. of printed matter, should be limited as much as possible. (6) If virgin pulp is used as the raw material, the pulpwood used is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. This does not apply to virgin pulp manufactured with lumber obtained from thinning, or virgin pulp manufactured by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with small diameter. (7) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. ***Printing*** under consideration in the evaluation criteria in this section denotes the printing service for production of report documents, posters, flyers and pamphlets, it doesn't apply when purchasing it as other category items such as stationary. However, if it is purchased as other category items, effort must be made to purchase which meet the evaluation criteria of ***printing*** section.
2. ***Offset printing*** is the printing method of shifting the printing inks to printing plate and re-shifting the inks to papers etc.
3. ***Digital printing*** is the printing method of without printing plate by electrophotography method or inkjet method.
4. Recycle compliancy noted in Evaluation Criteria <Common Criteria> (2) and (3) should be listed in accordance with "Guidelines for Producing Recycle-Compliant Printed Matter" created by Paper Recycling Promotion Center and operated by Japan Federation of Printing Industries. However, it does not apply if recycle-compliancy ranking test for used paper is not provided in the material used.
5. ***Recycle-compliancy*** in Evaluation Criteria <Common Criteria> (3) should be indicated as follows. However, it does not apply to the printed matter not to assume to recycle, for instance, in the case of preserves or keeps it for a long term. Recycle-Compliancy Ranking Test for used paper and method of display should take into account the investigation results of "Guidelines for Producing Recycle-Compliant Printed Matter" and make alterations as needed.
    (1) When only material from rank A is used, ***May be recycled into printing paper*** must be indicated.
    (2) When only material from rank A or B is used (with the exception of (1)), ***May be recycled into cardboard*** must be indicated.
    (3) When material from ranks C or D is used, ***Unsuitable materials to recycling are used.***
6. Each procurement organization must confirm material used with the Material Confirmation Sheet shown in Table 3. It is considered that it might be preferable to do the luster lamination etc. for long-term use and the strength reinforcement etc. of printed matter. Select materials suitable for use appropriately.
7. ***Inks contain vegetable based oil*** indicates that meet the ratio of contents of vegetable based oil fulfill the requirement of each ink type provided as shown in the following table.

Ink types	Ratio of vegetable based oil content
Journal rotary offset printing ink	30% or more
Non heat set printing ink for rotary press	30% or more
Sheet-fed printing ink (gold, silver, pearl and white ink)	20% or more (10% or more)
Business form ink	20% or more
Heat set printing ink for rotary press	7% or more
UV ink	7% or more

8. ***Aromatic compounds*** denote aromatic hydrocarbon compounds detected when applying component testing method of petroleum products determined by JIS K2536.
9. ***Green Standards for Off-set Printing*** and ***Green Printing Qualification System*** by Japan Federation of Printing Industries should be referenced for Evaluation Criteria <Common Criteria> (4), Factors for Consideration (2) ,(3), (4) and (5).
10. Each procurement organization must confirm the execution of standard of print at each stage of work, referring check list described as Table 4, if necessary.
11. ***Chemical safety*** of Evaluation Criteria <Individual Criteria> (1) b. denotes that fulfill the following a and c. ***Chemical safety*** of Evaluation Criteria < Individual Criteria> (2) b. denotes that fulfill the following a. or b. and c.
    (a) Comply with the Japan Printing Ink Maker's Association's ***Self-imposed Controls on Printing Ink*** (Negative List Control) (revision on September, 2011) .
    (b) The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.
    (c) The SDS (Safety Data Sheet) issued by printing ink manufacturers shall be submitted.
12. Each procurement organization must try to estimate the necessary number or amount of printed matter properly so as not to become an excessive order.
13. Confirmation of the legality and the sustainability of the forest where paper originates from is to be conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)".

    In cases where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, the proof that the lumber is legal in accordance to the guideline above is not necessary, as long as the party that is maintaining the lumber and the products documents on a certificate by April 1st, 2006 that the said contract has been completed before April 1st, 2006.

Table 1 : Recycle-Compliancy Ranking Test for Used Paper

	Rank A	Rank B	Rank C	Rank D
	Will not interfere when recycling into paper or cardboard	Will interfere when recycling into paper, but will not interfere when recycling into cardboard	Will interfere when recycling into paper or cardboard	Cannot be recycled into paper or cardboard as even small amounts cannot be removed
(1)Paper	**Regular paper** Construction paper, coated paper, high quality paper, medium quality paper, straw paper			
	Processed paper Colored paper (Rank A), fancy paper (Rank A) Resin permeated paper (water soluble)	**Processed paper** Colored paper (Rank B), fancy paper (Rank B), paper coated with resin such as polyethylene, etc., paper laminated with resin such as polyethylene, glassine paper, India paper	**Processed paper** Colored paper (Rank C), fancy paper (Rank C) resin permeated paper (excluding water soluble types), sulfate (parchment) paper, tarpaulin paper, wax paper, cellophane, synthesized paper, carbon paper, carbon-less paper, thermal paper, solderless paper	**Processed paper** Sublimation transfer paper, thermal foam paper, aromatic paper
(2) Inks	**Regular inks** Relief printing inks, flat printing inks (offset printing inks), gravure ink solvent, flexo-ink solvent, screen inks	**Regular inks** Water based gravure ink, water based flexo-ink		

	Specialty inks Recycle-ready UV ink☆, Silver and gold ink for offset printing, pearl ink, OCR ink (oil-based)	**Specialty inks** UV ink, silver and gold ink for gravure printing, OCR UV ink, EB ink, fluorescent ink	**Specialty inks** Thermal ink, low sensitivity ink, magnetic ink	**Specialty inks** Sublimating ink, foam ink, aromatic ink
	Specialty processing OP varnish			
	Digital Printing Inks Recycle-compliant Dry Toner ☆	**Digital Printing Inks** Dry Toner		
(3) Processing material	**Binding Processing** Binding wire, stapler, etc.; fine retardant EVA hot melt☆; PUR hot melt☆; water based glue	**Binding Processing** Binding thread, EVA hot melt	**Binding Processing** Cross coating(cloth cross, paper cross)	
	Surface processing Glossy coat (varnished, press coating)	**Surface processing** Glossy laminating (PP coating); UV coating; UV laminating; foil coating		
	Other processing Recycle-compliant seals (all dissolve adhesive paper) ☆	**Other processing** Seals (with the exception of recycle-compliant types)	**Other processing** Three dimensional printed material (lenticular lens used)	
(4) Others		**Foreign substance** Adhesive tape (recycle-compliant)	**Foreign substance** Stone, glass, metal (excluding binding stapler, metal, etc.), sand, wood chips, plastic, cloth, building	**Foreign substance** Fragrant accessories (deodorant, perfume, lipstick, etc.)

			material (gypsum board, etc.), non-woven cloth, adhesive tape (excluding recycle-compian t types)	

Note:

1. Each organization must confirm publishing in data base of "Producing Recycle-Compliant Printed Matter" operated by Japan Federation of Printing Industries, to use materials marked "☆" (Fine retardant EVA hot melt; PUR hot melt Recycle-ready UV ink, Recycle-compliant seals, Recycle-compliant Dry Toner).
2. Each organization must confirm the recycling aptitude of each product about materials marked "*" (colored paper and fancy paper), published by "The Ministry of the Environment ***Law on Promoting Green Purchasing. net***".

Table 2: Environmental Consideration Item and Criteria Relating Offset and Digital Printing at Each Process

Process	Item		Criteria
Proofing process	Digitization		The process digitization ratio (adoption of DTP) is 50% or more.
	Silver recovery from waste liquid and plate-making film		In the process to use plate-making film, silver is recovered from waste liquid and plate-making film.
Plate process	Reuse or recycling of printing plates		Printing plates (of aluminum base material) are reuse or recycled.
Printing process	Offset	VOC emission	VOC emission suppressing measures such as placing covers to discarded waste-cloths containers and detergent containers are taken.
			In the case of hot air drying printing in rotary presswork, VOC emission treatment equipment is installed and properly operated and managed.
		Recycling for papermaking stock	The recycle ratio of spoilage, etc. (waste sheet and remain sheet generated from the presswork) to papermaking stock shall be 80% or more.
	Digital	Decrease of negative environmental impact of the printing machine	The activity of conservation of energy is taken such as use of power-saving feature and power off when unused.
		Recycling for papermaking stock	The recycle ratio of spoilage, etc. (waste sheet and remain sheet generated from printing process) to papermaking stock shall be 80% or more.
Surface treatment	VOC emission		Alcohols are used at the concentration less than 30%.
	Recycling for papermaking stock		The recycle ratio of spoilage, etc. (waste sheet, remain sheet and remain film generated from gloss coating process) to papermaking stock shall be 80% or more.
Binding treatment	Suppress noise and vibrations		Approaches are made to suppress noise and vibrations such as prohibiting windows and doors from being kept open, etc.
	Recycling for papermaking stock		The recycle ratio of spoilage, etc. (waste sheet generated from binding treatment process) to papermaking stock shall be 70% or more.

Note:

1. This criteria is assumed the one applied to the other party does the main process of the print service regardless of the main contractor or the subcontract of the print service, and not applied to the other party who does a part of process of the print service that

relates to the offset printing or digital printing.

2. In proofing process, it only has to fill either of ***Digitalization or Silver recovery from the waste liquid and the make-up film***.
3. ***Silver recovery*** in proofing process indicates having a silver collection system or hand it over to the recycling trader and the waste collection trader who has adopted the silver collection system. It is necessary to execute the silver recovery from the waste liquid and the plate-making film, exclude an impossible case technically.
4. It is necessary to execute the printing plates reuse or recycling (recycling is included which the printing plates while keeping the quality and the reproducing to the printing plates again.) in plate process, exclude an impossible case technically.
5. It is considered as meeting the evaluation criteria if making and operating the manual etc, to execute measures concerned about ***VOC emission*** in offset printing process, ***Decrease of negative environmental impact of the printing machin*e** in digital printing process and ***Suppress noise and vibrations*** in binding treatment process.
6. ***Recycling to the papermaking stock etc.*** in digital printing process and surface treatment process includes recycling (processing to RPF and energy recovery etc.) other than recycling for papermaking stock etc.

Table 3 : Material Confirmation Sheet (sample)

Date:
To:

XYZ Company

Subject:

Material Confirmation Sheet

Printing material		Used	Recycle-compliancy ranking	Category	Manufacturer, product name	Note
Paper	Text	X	A	High quality paper	xx paper manufacturing	
	Front cover	X	A	Construction paper	xx paper manufacturing	
	Back cover	X	A	High quality paper	xx paper manufacturing	
	Covering material					
Ink		X	A	Flat printing ink	xx ink company	
Processing	Binding processing	X	A	PUR Hot melt		
	Surface processing	X	A	OP varnish	xx chemicals	
	Other processing					
Others						

↓

Recycling procedures		Evaluation
Only material from rank A is used	***May be recycled into printing paper***	X
Only material from ranks A and B are used	***May be recycled into cardboard***	
Material from ranks C or D are used	***Unsuitable materials to recycling are used***	

Note:

1. Refer to latest "Guidelines for Producing Recycle-Compliant Printed Matter, published in Producing Recycle-Compliant Printed Matter", when filled in Material Confirmation Sheet about the printing material.

2. In case of using materials such as paper and ink that recycle-compliancy ranking test for used paper is not provided, fill out "Outside the rank" in the column of recycle-compliancy ranking.
3. This sheet form can be changed according to the necessity for the inquiry of content and the necessity for stamps, etc.

Table 4: Environmental Consideration Checklist for Offset Printing Process (sample)

Date:
To:

XYZ Company

Environmental Consideration Checklist for Offset Printing Process

Process	Achievement		Standard (Content of demand)
Proofing process	Yes／No		1. Meet the one of the following. A: The process digitization ratio (adoption of DTP) is 50% or more. B: In the process to use plate-making film, silver is recovered from waste liquid and plate-making film.
Plate process	Yes／No		2. Printing plates (of aluminum base material) are reuse or recycled.
Printing process	Offset	Yes／No	3. VOC emission suppressing measures such as placing covers to discarded waste-cloths containers and detergent containers are taken.
		Yes／No	4. In the case of hot air drying printing in rotary presswork, VOC emission treatment equipment is installed and properly operated and managed.
		Yes／No	5. The recycling ratio of spoilage (waste sheet and remain sheet generated from the presswork) to papermaking stock shall be 80% or more.
	Digital	Yes／No	6. The activity of conservation of energy is taken such as use of power-saving feature and power-off when unused.
		Yes／No	7. The recycle ratio of spoilage, etc. (waste sheet and remain sheet generated from printing process) to papermaking stock shall be 80% or more.
Surface processing	Yes／No		8. Alcohols are used at the concentration less than 30%.
	Yes／No		9. As an approach for promoting recycling, the recycle ratio of waste sheets, etc.(waste sheet, remain sheet and remain film generated from gloss coating process) to recycled paper, etc. is 80% or more.
Binding processing	Yes／No		10. Approaches are made to suppress noise and vibrations such as prohibiting windows and doors from being kept open, etc.
	Yes／No		11. The recycle ratio of spoilage, etc. (waste sheet generated from binding treatment process) to papermaking stock shall be 70% or more.

Note: This sheet form can be changed according to the necessity for the inquiry of content and the necessity for stamps, etc.

(2) Target Setting Guideline

Ratio of the number of printing jobs that meet the criteria to the number of printing jobs to be procured (including those that are ordered as a part of other services such as commissions to outside groups) in the fiscal year.

22-3. Cafeteria

(1) Items and Evaluation Criteria

Cafeteria	**Evaluation Criteria** Cafeteria operating under commission in a government building or its grounds must fulfill the criteria below: (1) Cafeteria must practice appropriate measures for recycle and reuse including the reduction in type and volume of garbage. (2) Dishes used must be capable of repeated use. **Factors for Consideration** (1) Garbage that has been treated in a disposal, etc. shall be used as fertilizer, livestock feed, or converted into energy. (2) Biodegradable bags and draining nets, if used, must be composted with garbage. (3) Ingredients used in cafeteria must be the one contributing to the promotion of utilization of the agriculture, forestry and fishery products in the region. (4) Dishes shall be used that can be used again by mending, or for which the reworked material are used. (5) Return and collect of the containers and packaging are executed to re-use.

Note:

1. Evaluation criteria listed here is to be applied when ordering food and drinks to be used for conferences, etc., from cafeterias, coffee shops, etc., that is operating under a commission agreement in the government buildings and their sites.
2. ***Utilization the of the agriculture, forestry and fishery products in the region*** in Factors for consideration (3) refers to consume agriculture, forestry and fishery products produced in domestic region and to consume agriculture, forestry and fishery products produced in other region when the supply of those are insufficient. It is based on the outline of Article 25 of "Law concerning creation of new business such as agriculture and forestry fishermen utilizing regional resource and promotion of utilization of agriculture, forestry and fishery products in the region (Low No.67, 2010).

(2)Target Setting Guideline

The number of cafeteria meeting the criteria in the fiscal year.

22-4. Recapped Automobile Tires

(1) Items and Evaluation Criteria

Recapped automobile tires	**Evaluation Criteria** Must fulfills one of the following: (1)Automobile tire that has ended its first life due to wear is restored by replacing the surface rubber material so that it may be used for a second life. (2)Tire that can be cutting tread again (Regroovable) without recapped. **Factors for Consideration** (1)Extended life of the item should be accounted for by the use of radial tires, etc. (2)Noise reduction during operation is taken into account. (3)Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Notes:

1. ***Recapped automobile tires*** under consideration in the evaluation criteria in this section refers to “tires for small trucks” and “tires for trucks and busses”, as well as “tires for industrial automobiles” and “tires for construction automobiles”.
2. Recapped automobile tires that meet the standard of JIS K 6329 (Retreaded tires) fills Evaluation Criteria (1).

(2)Target Setting Guideline

The number of recapped automobile tires to be purchased in the fiscal year (including those that are purchased as a part of automobile maintenance).

22-5. Automobile Maintenance

(1) Items and Evaluation Criteria

Automobile maintenance	**Evaluation Criteria** (1) Automobile recycled parts (refers to reuse parts (commercial automobile parts removed from a car that can no longer be used for its original purpose, certified for quality, and cleaned), or rebuilt parts (commercial automobile parts removed from a car that can no longer be used for its original purpose, worn or degenerated parts replaced and rebuilt, certified for quality, and cleaned)) are used. (2) When cleaning the engine, the following must be fulfilled: a. The cleaning process decreases material that causes environmental pollution (hydrocarbon and carbon monoxide) by 20% or more. Cleaning of the engine should be performed on automobiles whose hydrocarbon and carbon monoxide levels as determined by measuring instruments of respective material after performing the typical maintenance required for the prevention of environmental emission prevention exceed those listed category-wise in Table. b. Effect of the evaluation criteria is assessed immediately after the engine is cleaned, as well as at the designated twelve month inspection. A system is set up so that a service that is free of charge is available when the cleaning process does not decrease aforementioned material by 20% or more when engine is cleaned on automobiles on which the necessary maintenance has been adequately performed. **Factors for Consideration** (1) Measures are in place for the collection and compilation of information concerning the reduction of environmental load through engine cleaning. Detailed information concerning effects on the reduction of environmental through engine cleaning and its cost are actively provided. Relevant information must be open to public. (2) Effort must be made for recycling of long life coolant. (3) Concerning automobile maintenance, efforts must be made for the adequate use of resources including energy and solvent; consideration must be made for the reduction of environmental load. (4) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Note:

1. Evaluation criteria (1) in this section refers to procedures referred to automobile maintenance businesses that involves replacement of parts (excluding replacement of expendable parts), including regular inspection, and automobile maintenance required as a result of a breakdown or an accident.
2. ***Automobile*** under consideration refers to passenger cars, small-size cars, and mini-size cars (but does not include motorcycles).
3. When automobile parts are not available or difficult to obtain, maintenance using new parts will be considered in this section.
4. ***Engine cleaning*** in Evaluation Criteria (2) refers to a service commissioned to automobile maintenance company, etc. for a regular inspection and maintenance, etc. that includes assessment using instruments for measuring hydrocarbon and carbon monoxide levels. In cases where levels exceed the criteria listed in Table, engine combustion room will be cleaned in order to remove carbon, sludge, etc. that have accumulated inside.
5. Evaluation Criteria (2) applies to regular automobiles, small-sized automobiles, and light automobiles (excluding those with two cycle engines) that use gasoline as its fuel.
6. Criteria for gas emission that requires engine cleaning noted in Evaluation Criteria (2) must comply with allowable limit of automobile gas emission based on environmental pollution prevention guideline (Ministry of the Environment Notification No.1, January 21, 1974).
7. A system is in place to accommodate requests for above tasks from automobile maintenance businesses and automobile dealers that do not perform engine cleaning.

Table : Criteria for Gas Emission that Requires Engine Cleaning

Type of Automobile	Carbon Monoxide (CO)	Hydrocarbon (HC)
Regular Automobiles, Small-Sized Automobiles	1%	300ppm
Light Automobiles	2%	500ppm

(2)Target Setting Guideline

Ratio of the number of automobile maintenances that meet the criteria to the number of Automobile Maintenances conducted in the fiscal year.

22-6. Management of Government Office Buildings, etc.

(1) Items and Evaluation Criteria

Management of government office buildings	**Evaluation Criteria** (1) Products used for management of government office buildings, when applicable to the designated procurement items, fulfill the evaluation criteria of each items. (2) Appropriate measure for each facility is selected from a to d below, and state of operation is reported monthly to the management of the institution in based on management criteria including operation of facilities and machines, frequency of measurement, and frequency and method of inspection. a. Adequate setting and management of temperature and humidity is in place. b. Measures are in place for the maintenance of lighting efficiency. c. Measures are in place for the maintenance of energy efficiency in air conditioning and heat source equipments. d. Adequate management and measures are in place for facility to receive and transform electricity, control facility, and supply and drainage of water. (3) In stationed management, monthly reports are provided to the facility manager on the usage of energy and water, and amount of waste material discharged. When a substantial increase is observed when compared to the previous month or the same month of the previous year, the measures listed below are proposed to the facility manager . When a substantial decrease is observed, the cause of the decrease is examined. a. In the case of increase in energy usage, analyze the cause of the increase, and put in place appropriate energy saving measures that takes into account the analysis (includes energy saving measures that are conducted in cooperation with facility users). b. In the case of increase in water usage, analyze the cause of the increase, and put in place appropriate energy saving measures that take into account the analysis (includes water saving measures that are conducted in cooperation with facility users). c. In the case of increase in discharge of waste material, analyze the cause of the increase and put into place appropriate measures for decreasing waste material and for material saving (includes measures for decreasing waste material and for material saving that are conducted in cooperation with facility users). (4) In non-stationed management, when substantial increase in energy consumption, water consumption and amount of discharge in waste material are observed compared to the

	previous month or the same month of the previous year, analysis of its cause is performed and measures to decrease are proposed in cooperation with the facility manager.When a substantial decrease is observed, the cause of the decrease is examined. (5) When the maintenance of air conditioning and heating installation are included in the management of government office buildings, appropriate measures for prevention of chlorofluorocarbon leakage of chlorofluorocarbon are made. **Factors for Consideration** (1) An appropriate and effective methods for energy efficiency in government buildings and measures to contribute to leveling of demand for electricity are to be conducted in consideration of "Evaluation Criteria for Businesses Regarding Efficient Use of Energy in Factories and Businesses (No.66 of the Ministry of Economy, Trade and Industry notification in 2009)" and "Guidelines for Companies in Relation to the measures to contribute to leveling of demand for electricity in Factories" (No.271 of the Ministry of Economy, Trade and Industry notification in 2013), based on the Regulations for the Efficient Use of Energy (Act No.49 of 1979), in consideration of Criteria for Sanitation Management of Architectural Environment, etc, based on Architectural Sanitation Law. (2) Efforts should be made to utilize various tools for management and evaluation in the analysis and evaluation of energy management and use in facilities. (3) When considerable increase compared to the previous month is identified upon tallying the collected garbage, the causes are to be identified and measures are to be proposed.
Landscape management	**Evaluation Criteria** (1) Products that fulfill the evaluation criteria are to be used when products used for landscape management apply to specified items for procurement. (2) A system is in place for comprehensive management of vermin and harmful insects and weeds capable of maintaining them at a low concentration through appropriate pruning and trimming that would result in improved ventilation and securing of adequate sunlight, in addition to executing appropriate prevention and control methods. (3) Efforts should be made to decrease the frequency and quantity of pesticides. Only the appropriate pesticides that have been registered in accordance with pesticide control law should be used adequately and effectively by following the label instructions on method of use (frequency, quantity, concentration, etc.) and label warnings.

	Factors for Consideration (1) Consideration is made for use of irrigated rainwater. (2) A system is in place for the reduction of environmental load from compost, etc. when disposing branches and leaves resulting from pruning and weeding. (3) Compost created from leaves, etc. that resulted from landscape management (soil improvement material) is used for fertilization. (4) When transplanting is required, a proposal should be made to facility manager for the selection of tree types with low possibility of harvesting vermin and harmful insects, while in consideration for the existing landscape. (5) Equipments and tools used for landscape management should be selected upon taking into consideration their ability to decrease environmental load. (6) Using the planting material that substitute for the soil for landscape management as much as possible.

Note:

1. ***Stationed management*** refers to a system of management where a personnel that performs the operation, surveillance, and daily inspection and maintenance, etc. is stationed on site.
2. Evaluation Criteria (2), (3) and (4) for Government Building Management should be applied when work included in contract includes content that applies to the evaluation criteria.
3. Measures to be put in place in accordance with Evaluation Criteria (2) for Government Building Management should be conducted with an understanding of the management status of the facility, size of buildings, usage of facilities and machines in the building, in consultation with the facility manager, and in reference to Table below.
4. ***Building users*** refers to people who work in or visit the building.
5. Evaluation Criteria (2), (3) and (4) for Government Building Management shall not include renovation of the facility, or the renewal or introduction of large scaled facilities and equipment.
6. ***Fluorocarbons*** are defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001).
7. ***Landscape management*** under consideration in Evaluation Criteria refers to the management of landscaping around government office buildings, etc. and rooftop landscaping, etc.
8. A system for comprehensive management of vermin and harmful insects and weeds in Evaluation Criteria (2) of Landscape Management refers to a system that considers comprehensively the reduction of load upon health and environment while taking financial efficiency in consideration. Measures include research of outbreak conditions, early detection of damage, and selection of physical removal strategies including pruning and catch-and-kill.
9. Evaluation Criteria (2) and (3) of Landscape Management should conform to “Use of Agricultural Chemicals in Residential Districts (No.175, April 26, 2013, decision No.

1304261; joint notice by Director of Consumption and Safety of Ministry of Agriculture, Forestry and Fisheries, and Director of Water and Atmospheric Environment of Ministry of Environment)", related such as information provision for the dissemination facilities manager who lies use of pesticides and for the surrounding area, splash prevention and retention of records for agricultural chemicals.

Cleaning	**Evaluation Criteria** (1) Products used for cleaning of government office buildings, when applicable to the specified items for procurement, must fulfill the evaluation criteria. (2) From the perspective of efficient use of resources, liquid soap or soap used for hand washing in the lavatory are to use as raw materials waste oil or animals and vegetable oil. (3) Waste collection is to be distinguished between recyclable waste (paper, cans, glass bottles, plastic bottles, etc), kitchen waste, combustible waste, and incombustible waste, and collected appropriately. (4) Among the recyclable recycled paper waste is separated and collected with consideration for recycling of used paper. In cases where separation is inadequate or discharge amount has dramatically increased when compared to the previous month or the same month of the previous year, a plan for improvement should be presented in cooperation with the facility manager. (5) The content of volatile organic compound in products for floor maintenance (wax), detergent, etc. is below the amount specified in the guideline. (6) The business possesses the skills that contributes to the reduction of environmental load, and makes specific proposals to further decrease environmental load in their cleaning methods. **Factors for Consideration** (1) Consideration is made for the reduced use or appropriate use of material for floor maintenance, detergents, etc. used for cleaning. (2) Replacement items will not be supplied in excess. (3) Cleansers must have the hydrogen ion concentration (pH) that is appropriate for their use. (4) Floor fiber products used for floor maintenance, cleaning, etc. must not contains, as much as possible, designated chemical material. (5) When cleaning, effort is made to reduce the amount of energy resources such as electricity and gas, as well as resources such as water. (6) Effort is made to suggest frequency of cleaning that is appropriate for the building condition. (7) Even when items necessary for the cleaning of government

	office buildings do not apply to the designated procurement items, consideration will be paid to the reduction of environmental load during its lifecycle from the collection of resources to disposal.

Note:

1. For Evaluation Criteria (4) of Cleaning, each procurement organization should refer to Tables 1 and 2, while taking into consideration the state of paper use and disposal in government buildings, etc., and determine the separation criteria for discharged used paper in cooperation with cleaning businesses. Separation must be conducted thoroughly by eliminating material that may obstruct paper recycling. Recycle-compliant printed matter that fulfils the Evaluation Criteria for printed matter should be adequately separated so that it may be used as raw material for paper.
2. The specified amount for volatile organic compound in Evaluation Criteria (5) of Cleaning is to conform to the amount for indoor concentration designated by the Ministry of Health, Labor and Welfare.
3. Cleaning methods that contribute to the reduction of environmental load, as noted in Evaluation Criteria (6) refers to tactics such as the application of cleaning methods based on the level of contamination, application of preventative cleaning methods that removes before the contamination of room environment, enforcement of reliable contamination removal through maintenance of cleaning machinery performance.
4. In Factors for Consideration (3) of Cleaning, reference should be made to the hydrogen ion concentration (pH) of synthetic detergent based on Household Products Quality Indicator. The hydrogen ion concentration of products for floor maintenance and floor detergents as undiluted solution should ideally be between pH5 and pH9.
5. ***Designated chemical material*** noted in Factors for Consideration (4) of Cleaning refers to material that apply to "Laws Pertaining to the Promotion of Understanding and Maintenance Improvement of Environmental Emission of Designated Chemical Material (PRTR Law)."

Treatment of confidential documents	**Evaluation Criteria** (1) Type and amount of paper to be discharged at the facility concerned is taken into consideration, methods of separation and treatment is proposed in accordance with the facility conditions, and adequate collection is enforced to use as raw material for paper. (2) For disposal of confidential documents, the following should be fulfilled in order to enable reuse as raw material for paper upon taking adequate measures to avoid leaking of confidential information during each step of treatment, including discharge and temporary storage, collection, transportation, and disposal. a. Facilities and systems are in place to remove material that may obstruct paper recycling. b. Direct dissolution treatment is to be conducted at a facility equipped with a system for removal of foreign material. c. Treatment involving crushing should be conducted

	in a way that would preserve as much fiber in the paper as possible. (3) A certification that indicates that the disposal of confidential documents has been completed can be shown to the client. **Factors for Consideration** (1) Discharge amount of confidential documents is measured regularly and reported to the client. (2) Treatment is conducted in such a way to enable recycling as paper (printing paper, information paper, hygienic paper). (3) For transportation, planning is conducted to enable efficiency for loading methods, transportation methods and transportation routes. (4) Transportation utilizes as much as possible vehicles with fuel efficiency and low environmental impact.

Note:

1. Procuring facilities should consider the degree and necessity of confidentiality when discharging documents, and reduce as much as possible the amount of confidential documents to be discharged.
2. Procuring facilities should fully consider the following:
    a. For ordering treatment involving crushing noted in Evaluation Criteria (2), size of the cut paper pieces should be confirmed (From the standpoint of paper recycling, larger sized paper is desirable. Standard for paper size as noted by businesses is 10mmx50mm or larger.).
    b. Keeping in mind that shredder treatment inside government buildings etc. generally decreases the applicability for recycling, it should be conducted with consideration for the degree and necessity of confidentiality. Efforts should be made to request for collection of shredded paper by businesses that collect paper for recycling, businesses that treat confidential documents, etc., so that they may be used appropriately according to paper type (paper width appropriate for recycling is 5mm or more).
3. A certification that indicates that the disposal of confidential documents noted in Evaluation Criteria (3) refers to documents that certify that the collected confidential documents have been used as raw material for paper after being treated to eliminate confidential information. This document only applies to instances when an outside business is commissioned to conduct treatment such as melting and crushing, and does not apply to shredded paper pieces resulting from shredder treatment within each procuring facility.

Table 1 : Separation procedure for used paper (sample)

Classification	Item
Newspaper	Newspaper (includes enclosed advertisements)
Cardboard	Cardboard
Magazines	Poster, ads, magazines, reports, catalogs, pamphlets, bound material such as books, notes
OA paper	Copier paper and its equivalents

Recycle-compliant printed matter	Printed matter that ***May be recycled into printing paper*** (uses only materials in Rank A)
	Printed matter that ***May be recycled into cardboard*** (uses only materials in Ranks A and B)
Other miscellaneous paper	Envelopes, paper boxes, DM, memo paper, wrapping paper, and others that are not included in the above
Shredder pieces	Paper that has been shredded within government buildings, etc.

Note:
Recycle-compliant printed matter refers to printed matter on which the recycle-compliancy is displayed in the standards for judgments concerning printing (refer to ***printing*** section) of the printed matter.

Table 2 : Materials that may interfere with recycling of used paper(sample)

Category	Type
Paper products	Envelopes with adhesive material
	Paper treated with waterproof material
	Carbon paper, carbon-less paper (duplicate receiving slip for package delivery, etc.)
	Privacy sealed postcards
	Thermal paper
	Photographs, Inkjet photo paper, blueprint paper
	Paper made of composite material such as plastic film and aluminum foil
	Paper on which metal foils such as gold and silver are mounted
	Fragrant paper (wrapper for soap, detergent container made of paper, paper box for incense)
	Sublimation transfer paper, iron print paper, etc.
	Thermal foam paper
	Composite paper
Material other than paper	Adhesive tape
	Iron on patch
	Metal used in files
	Film
	Styrofoam
	Cellophane
	Plastic products
	Glass products
	Cloth products

Pest prevention	**Evaluation Criteria** (1) When material used for pest prevention falls in the category of

	specified items for procurement, products that fulfill the evaluation criteria is used. (2) Abuse of rodenticides and pesticides is avoided. A comprehensive prevention method taking into consideration research of their habitation condition, etc. is in place. (3) Measures for preventing outbreak and invasion of pests, etc. is in place. (4) A predetermined plan or target for prevention work is in place. Judgment of effectiveness (confirmation and examination, evaluation of prevention effectiveness, etc.) is conducted after the prevention work. (5) Rodenticides and pesticides must be pharmaceutical products that have been approved of manufacture and sales through Pharmaceutical Affairs Law, and applied appropriately in accordance with the designated frequency, amount and concentration. **Factors for Consideration** Effort is made to propose pest prevention method that is most appropriate for the habitat condition.

Note:

Pest prevention that is under consideration in the evaluation criteria refers to the prevention of animals, etc., including mice, insects, and foreign life, that can potentially cause damage to people's health in government office buildings based on "Laws Concerning the Securing of Hygienic Environment in Buildings (Hygiene Law Concerning Architecture)."

Table: Examples of Energy Efficient Strategies for Management and Use of Government Buildings

Facilities	Energy Efficient Strategies (examples)	Standards for Management (examples)		(1) Daily/ periodic inspec-tion	(2) User co-operation	(3) Management and operation
		Stationed Manage-ment	Non-Stationed Manage-ment			
Receiving and transforming electricity	Reconsideration of interior temperature of substations	Seasonally	--			*
	Frequent manual adjustment based on demand	As needed	--			*
	Thorough management of power factor using phase acceleration condensers (for manual types)	As needed	--	*		
Lighting facilities	Avoiding excessive lighting in workspace; selective lighting in window area	Based on usage	Based on usage		*	
	Turning off, or selective lighting in hallways	Based on usage	Based on usage		*	
	Turning off lights in un-occupied restrooms and kitchens	Daily	--		*	
	Turning off lights in empty rooms and storage	Daily	As appropriate			*
	Turning off lights during lunch break	Daily	--		*	
	Selective lighting and concentration of work areas during overtime hours	Daily	--		*	
	Shortening or restricting of lighting during opening time	Daily	--		*	

	Cleaning of lighting fixtures for increased lighting efficiency	Once or more per year	Once or more per year	*		
	Periodic exchange of lamps	Once every 2~3 years	Once every 2~3 years			*
	Elimination of partitions	As appropriate	--		*	
	Elimination of OA louvers	As appropriate	--		*	
	Improvement of desk and workspace layout	As appropriate	--		*	
	Frequent adjustment of solar timers	Once or more per month	Once or more per month			*
	Employment of area-specific lighting	As needed	--		*	
	Frequent manual turning off of light switches	As needed	--		*	
Transportation system	Selective operation of elevators and escalators	Daily	--			*
	Promotion of stairway use	Daily	--		*	
	Elevators to stop on selective floors	Daily	--			*
	Cooperation with in-building delivery system	Daily	--		*	
Plumbing and sanitary facilities	Time restriction and area reduction of hot water usage	In accordance with season and outdoor temperature	Seasonally		*	
	Stoppage of hot water in restrooms, etc. during summer	Daily during applicable period	Daily during applicable period			*
	Change of hot water temperature	In accordance with season and outdoor temperature	Seasonally			*

	Narrowing of branch valves for cold and hot water supply to an extent that does not result in inconvenience	As appropriate	As appropriate			*
Ventilation facilities	Restriction of ventilation in machine and electric rooms and storage	As needed	As needed	*		
	Turning off ventilation in unused rooms (storage, machine room, etc.)	As appropriate	As appropriate			*
	Natural ventilation through opening and closing of windows	In accordance with season and outdoor temperature	--		*	
	Inspection and replacement of fan belts	Once or more per year	Once or more per year	*		
Common factors for heating and air-conditioning facilities	Change in standards for interior temperature and humidity	In accordance with season and outdoor temperature	Seasonally		*	
	Optimization of operation and suspension of machines, including reduction of operation hours	Daily	Seasonally	*		
	Optimization of operation methods based on interior load factors for each season	Weekly or more	Seasonally			*

	Promote the practice of turning off related functions (outdoor units and thermal source devices) before turning off the air conditioner	Daily	--	*		
	Seasonal operation of heating and cooling in the interior perimeter area	In accordance with season and outdoor temperature	--			*
	Optimization of the placement of temperature and humidity sensor	As appropriate	As appropriate	*		
	Unification of temperature distribution through adjustment of placement and direction of vents	As appropriate	As appropriate	*		
	Reduction of heating and cooling period	In accordance with season and outdoor temperature	--		*	
	Stoppage of ventilation in empty rooms, storage, etc.	As appropriate	As appropriate			*
	Reduction of operation period	Daily	--			*
	Restricting air conditioning during overtime hours	Daily	--		*	
	Closing blinds and curtains before the weekend to lessen the air-conditioning load at the beginning of the work week	Daily	--		*	

	Restricting air conditioning during early morning and late night cleaning period	Daily	--			*
	Prohibiting opening of windows and doors during air conditioning hours	In accordance with season and outdoor temperature	--		*	
	Change in the layout of partitions and desks that obstruct air conditioning	As needed	--		*	
	Employ milder temperatures for common areas	Daily	Seasonally			*
	Educating workers on such matters as individual adjustment through clothing	Seasonally	Seasonally		*	
	Sprinkling water on the rooftop, etc. during summertime (employment of vaporization heat)	In accordance with outdoor temperature for the relevant period	--			*
Individual air conditioning units	Optimization of automatic control functions including sensors	As needed	As needed	*		
	Regular cleaning of air filters	Twice or more per year	Twice or more per year	*		
	Regular cleaning of hot and cold water fin coils	Twice or more per year	Twice or more per year	*		
	Elimination of obstructive objects from the vent area	As needed	--	*		

	Application of warm-up control	Daily	--			*
	Increase in thermostat temperature by 2~3 degrees C after air conditioner has started up and is running normally	In accordance with season and outdoor temperature	--			*
	Natural ventilation through opening and closing of windows	In accordance with season and outdoor temperature	--		*	
	Application of night purge	In accordance with season and outdoor temperature	--			*
	Prevention of short circuiting	As needed	As needed			*
	Enforcement of scheduled operation	As needed	As needed			*
	Prevention of air and water leakage from ducts thorough enforcement of maintenance of insulation material	Once or more per year	Once or more per year	*		
	Cleaning and maintenance of heat interchanger	Twice or more per year	Twice or more per year	*		
	Suspension of heat interchanger operation	In accordance with season and outdoor temperature	Seasonally			*
	Optimization of zero-energy band	Daily	--			*
Central air conditioning system	Energy efficient water temperature management (higher for cold water, lower for hot water)	Daily	--			*

	Controlled operation of maximum temperature difference operation (reduction of pump transportation ability)	As needed	--			*
	Periodic water quality management in hot and cold water as well as cooling water (prevention of decrease in ratio of heat transmission)	Once or more per month	Once or more per month	*		
	Suspension of heat source machine operation 30 minutes prior to turning off the air conditioning system	Daily	--			*
Boilers	Optimization of combustion equipments including air-ratio, exhaust gas temperature, etc	As needed	As needed			*
	Cleaning of heat transmission surfaces, removal of scales, etc.	Once or more per year	Once or more per year	*		
	Maintenance of heat transmission surfaces.	Once or more per month	Once or more per month	*		
	Boiler water quality management	Once or more per month	Once or more per month	*		
	Maintenance of steam trap function (drain recovery)	Once or more per month	Once or more per month	*		

	Maintenance of COP value (efficiency) in equipments	As needed	--	*		
Freezers	Optimization of freezer operation pressure	As needed	As needed	*		
	Cleaning tube interior of equipments including chemical and brush cleansing of vaporizers and condensers	As appropriate	As appropriate	*		
	Maintenance and inspection of measuring instruments including thermometers and pressure gauges	Twice or more per year	Twice or more per year	*		
	Maintenance of function, inspection, and maintenance of measuring equipments including manometers and sensors	Twice or more per year	Twice or more per year	*		
	Maintenance of COP value (efficiency) in equipments	As needed	--	*		
Cold and hot water generators, absorption freezers	Optimization and maintenance of airtight components of the equipment	As needed	As needed	*		
	Cleaning tube interior of equipments including chemical and brush cleansing of vaporizers and condensers	Twice or more per year	Twice or more per year	*		

	Maintenance and inspection of measuring instruments including thermometers and pressure gauges	Twice or more per year	Twice or more per year	*		
	Maintenance of function, inspection, and maintenance of measuring equipments including manometers and sensors	Twice or more per year	Twice or more per year	*		
	Maintenance of COP value (efficiency) in equipments	As needed	--	*		
Cooling tower	Management and removal of filth from fillers, management of water quality	As needed	As needed	*		
	Cleaning of cooling tower tank	As needed	As needed	*		
	Maintenance of chemical components in cooling water	As needed	As needed	*		
Pump related	Optimization of operation (start/stop), pressure, and water flow for secondary pump	As needed	--	*		
	Optimization of water quantity in ground packing, etc.	Once or more per month	Once or more per month	*		
	Maintenance of insulation material	Twice or more per year	Twice or more per year	*		

	Suspension of operation as needed for three or four pipe equipment	As needed	--	*		
Heat storage tank	Optimization in quantity of water and ice heat storage in heat storage tank	As needed	--			*
	Optimization of temperature distribution in tank	As needed	--			*
Fan coil	Optimized operation of perimeter fan coils (time period, temperature setting)	In accordance with season and outdoor temperature	--	*		
	Periodic cleaning of air filters	Once or more per month	Once or more per month	*		
	Period cleaning of cold and hot water fin coils	Twice or more per year	Twice or more per year	*		
	Ventilation of air conditioners, removal of obstructive material from vents	As needed	--	*		
Air-cooled heat pumps	Period cleaning of outdoor unit fin coils	Once or more per year	Once or more per year	*		
	Period cleaning of indoor unit fin coils	Once or more per year	Once or more per year	*		
	Period cleaning of indoor unit air filters	Once or more per month	Once or more per month	*		

	Confirmation and maintenance of operation conditions including operation pressure and operation current	Daily	--	*		
	Cleaning of heat transformer	Twice or more per year	Twice or more per year	*		
	Suspension measures for heat transformer operation	In accordance with season and outdoor temperature	Seasonally			*
Water-cooled packaging method	Periodic cleaning of indoor unit fin coil	Once or more per year	Once or more per year	*		
	Periodic cleaning of air filters	Once or more per month	Once or more per month	*		
	Confirmation and maintenance of operation conditions including operation pressure and operation current	Daily	--	*		
	Cleaning of heat transformer	Twice or more per year	Twice or more per year	*		
	Suspension measures for heat transformer operation	In accordance with season and outdoor temperature	Seasonally			*
	Chemical cleansing of cooling water	Once or more per year	Once or more per year	*		
Others	Energy conservation in vending machines (turning off illumination, turning off the machine at night)	Daily	--			*

	Turning off switches of OA equipments during lunch time, etc.	Daily	--		*	
	Efficient use of blinds and curtains	Daily	--		*	
	Understanding of energy data necessary for energy conservation	Daily	Once or more per month	*		

Note:

1. ***Daily/ periodic inspection*** are items that can be handled through daily inspection and periodic inspection operation.
2. ***User cooperation*** are items that can be handled through requesting cooperation from facility user (workers and visitors).
3. ***Management and operation*** are items that can be handled through management and operation of facilities, equipments, etc.

(2)Target Setting Guideline

Ratio of the number of jobs per category that meet the criteria to the number of jobs conducted in the fiscal year.

22-7 Transportation and Delivery

(1) Items and Evaluation Criteria

Transportation and delivery	**Evaluation Criteria** (1) The state of energy use, as well as the effects of energy efficiency efforts are being reviewed periodically. (2) Measures are in place for eco-drive promotion. (3) Inspection and maintenance of cars for environmental protection including reduction of environmental pollutant emission and maintenance of energy efficiency is being conducted. (4) Modal shift is put in place. (5) Measures are put in place for improved efficiency in transportation and delivery. (6) Information regarding the above criteria (the actual state of use and numbers showing the effect for criteria (1), and whether or not the measures are put in place for criteria (2) to (5)) are publicized on websites and environmental reports, etc., so that they may be easily confirmed, or, is judged objectively by a third party. **Factors for Consideration** (1) Adequate and effective application for the efficient use of energy and measures to contribute to leveling of demand for electricity in transportation and delivery is arranged, with consideration for "Evaluation Criteria for Freight Transportation Companies in Relation to the Efficient use of Energy in Freight Transportation (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notification No.7 (March 31, 2006)) and "Guidelines for Freight Transportation Companies in Relation to the measures to contribute to leveling of demand for electricity in Passenger Transportation" (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notification No.2 (January 17, 2014)), based on the Regulation for the Efficient Use of Energy (Act No.49 in 1979). (2) Incorporation of fuel-efficient, low pollution cars are promoted. At the same time, transportation and delivery using fuel-efficient, low pollution cars is being conducted as much as possible. (3) Improvements in carrying capacity is considered in order to decrease the number of cars being used for transportation and delivery. (4) Cooperative transportation and delivery is considered in order to decrease the frequency of transportation and delivery. (5) Devices to promote eco-drive is in place as much as possible. (6) Measures are taken for the incorporation of Intelligent Transport System (ITS) including Vehicle Information and Communication System (VICS) adaptable car navigation

	system, and Electronic Toll Collection System (ETC). (7) Commercial packaging for home delivery service items and small postal packages are to take into account ease of recycling and reduced environmental impact upon disposal. (8) Maintain an understanding of energy use conditions at offices and delivery distribution centers, and make an effort to decrease energy use rate in said facilities. (9) Request to those who are undertaking by contract part of the transportation and delivery to undertake, as much as possible, measures constructive towards the reduction of environmental load. (10)Being conducted by car fills the emission standard as much as possible, when driving in the measures region of the Law concerning Special Measures for Total Emission Reduction of Nitrogen Oxides and Small Particles from automobiles in specified areas (June 3, 1992 No.70).

Note:

1. ***Transportation and delivery*** under consideration includes domestic letter correspondences, home delivery service, small postal packages (general, documents, etc.), as well as mail service.
    a. ***Letter correspondences*** refer to documents that are meant to express the intentions of the sender, or to notify factual information, to a specified recipient.
    b. ***Home delivery service*** refers to delivery service that uses one or more of the following: special cargo transportation undertaken by general automotive cargo transportation business, or a corresponding cargo transportation, and train cargo transportation, domestic sea transportation, automotive cargo transportation, and air cargo transportation. Each cargo is to be 30 kg or less.
    c. ***Mail service*** refers to a transportation service that receives from the sender, relatively light packages of books, magazine, product catalogs, etc., and completes the delivery by placing those material into the mail box, etc. of the receiver. Each package is to be comprised of one document, and weigh 1 kg or less.
2. ***Eco-drive*** refers to "Recommendation for Eco-drive 10" published by Eco-drive Popularization Network (October 2012).
   Note: (1) Soft accelerator ***e-start***; (2) Keep a distance between cars and driving with little acceleration and deceleration; (3) Early stopping of acceleration when deceleration; (4) Appropriate use of air conditioner; (5) Stop a useless idling; (6) Avoid getting congested, have time and leave; (7) Inspection and maintenance of cars start from air pressure in the tires; (8) Removal of unnecessary load from car; (9) Stop parking that disturbs running.; and (10) Understand own fuel cost.
3. ***Measures are in place for eco-drive promotion*** noted in Evaluation Criteria (2) requires the fulfillment of the following:
    a. The driver has been informed of eco-drive.
    b. A manager responsible for eco-drive has been assigned, manual has been

created (including the use of an existing manual), and a system for promoting eco-drive has been put in place.
    c. Education and training regarding eco-drive is being performed.
    d. Energy use is being maintained through the maintenance of operation records under the categories of driver and car type.
4. ***Inspection and maintenance of cars*** in Evaluation Criteria (3) refers to the observance of the items outlined in the Regulations for Road Transportation and Delivery, including daily and regular inspections, as well as the establishing and execution of voluntary maintenance standards based on inspection and maintenance factors listed in Table. The objective here is to secure an environment that can maintain energy efficiency in automobiles.
5. ***Modal-shift*** refers to the shifting of transportation mode through the employment of mass transportation system with little environmental load including cargo transportation and domestic sea transportation.
6. ***Measures are put in place for improved efficiency in transportation and delivery*** noted in Evaluation Criteria (5) requires the fulfillment of the following:
    a. An energy efficient delivery route is selected beforehand, and the driver is notified thereof.
    b. A system for an appropriate delivery route, taking into account traffic information, is put in place.
    c. An adequate automobile type, taking into account amount of delivery items and regional characteristics, is selected.
    d. Transportation and delivery distance is shortened by differentiating between delivery station-based method and direct method.
7. ***Environmental Report*** refers to the environmental report designated by Regulations for Promoting Businesses that Takes into Consideration Environment of Specified Businesses, etc. through Promotion of Environmental Information Provision (2004 Regulation 77) Article 2, Item 4.
8. ***Fuel-efficient, low pollution cars*** in Factors for Consideration (2) should be referred to “13-1 Vehicles” in this Basic Policy.
9. ***Those who are undertaking by contract part of the transportation and delivery*** refers to cases where part of transportation and delivery operation under consideration here is being undertaken for the services concerned.

Table: Inspection and Maintenance Items for Environmental Preservation, Including Maintenance of Automobile Energy Efficiency, etc.

Promotional structure for inspection and maintenance	
	□ Inspection and maintenance is conducted in accordance with specified operation plan, and the results are recorded.
	□ A system is put in place to review the contents of inspection and maintenance, based on the results of inspection and maintenance.
Adequate inspection and maintenance of automobiles	
	■ When commissioning inspection and maintenance to a maintenance business, maintain an understanding of the automobile condition on a daily basis, and relay the condition when commissioning.
	■ Conduct inspection and maintenance when an increase in black smoke is confirmed by the eye.
	■ When the air-conditioner gas is considered to have decreased, based on the effectiveness of the car air-conditioner, conduct inspection and maintenance of the car air-conditioner, in order to prevent the discharge of chlorofluorocarbon into the atmosphere.
Inspection and maintenance based on voluntary maintenance standards	
	(Air cleaner element-related)
	■ For cleaning and replacement of air cleaner element, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection and maintenance accordingly.
	(Engine oil related)
	■ For the change of engine oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct oil change accordingly.
	■ For the replacement of engine oil filter, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct replacement accordingly.
	(Fuel equipment related)
	□ For overhauling or replacement of fuel equipment, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct overhaul or replacement accordingly.
	(Related to equipment for the reduction of gas emission)
	■ For the inspection of equipment for the reduction of gas emission (DPF, Oxidized catalyst), refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection accordingly.
	(Others)

	■ For the inspection and adjustment of tire air-pressure, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct adjustment in accordance with the actual measurement of air-pressure.
	□ For the inspection of transmission oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the transmission oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.
	□ For the inspection of deferential oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the deferential oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.

■ refers to items that must be conducted for inspection and maintenance of automobiles.

□ refers to items for which execution is desirable for inspection and maintenance of automobiles.

(2)Target Setting Guideline

Ratio of the number of transportation and delivery businesses that meet the criteria to the number of transportation and delivery businesses commissioned in the fiscal year.

22-8 Passenger Transportation (Automobiles)

(1) Items and Evaluation Criteria

Passenger transportation	**Evaluation Criteria** (1) The state of energy use, as well as the effects of energy efficiency efforts are being reviewed periodically. (2) Measures are in place for eco-drive promotion. (3) Inspection and maintenance of cars for environmental protection including reduction of environmental pollutant emission and maintenance of energy efficiency is being conducted. (4) Measures are put in place for improved efficiency in passenger transportation, or decrease in traveling distance of non-passenger occupied cars. (5) Information regarding the above criteria (the actual state of use and numbers showing the effect for criteria (1), and whether or not the measures are put in place for criteria (2)-(4)) are publicized on websites and environmental reports, etc., so that they may be easily confirmed, or, is judged objectively by a third party. **Factors for Consideration** (1) Adequate and effective application for the efficient use of energy and measures to contribute to leveling of demand for electricity in passenger transportation is arranged, with consideration for "Evaluation Criteria for Passenger Transportation Companies in Relation to the Efficient use of Energy in Passenger Transportation (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notification No.6 (March 31, 2006)), and "Guidelines for Passenger Transportation Companies in Relation to the measures to contribute to leveling of demand for electricity in Passenger Transportation (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notification No.3 (January 17, 2014)) based on the Regulation for the Efficient Use of Energy (Act No.49 in 1979). (2) Incorporation of fuel-efficient, low pollution cars are promoted. At the same time, passenger transportation using fuel-efficient, low pollution cars is being conducted as much as possible. (3) Devices to promote eco-drive is in place as much as possible. (4) Measures are taken for the incorporation of Intelligent Transport System (ITS) including Vehicle Information and Communication System (VICS) adaptable car navigation system, and Electronic Toll Collection System (ETC). (5) Maintain an understanding of energy use conditions at business and sales offices, and make an effort to decrease energy use rate in said facilities. (6) Effort is made for efficient dispatching of cars with the incorporation of GPS-AVM system.

Note:

1. ***Eco-drive*** refers to "Recommendation for Eco-drive 10" published by Eco-drive Popularization Network (October 2012).
   Note: (1) Soft accelerator ***e-start***; (2) Keep a distance between cars and driving with little acceleration and deceleration; (3) Early stopping of acceleration when deceleration; (4) Appropriate use of air conditioner; (5) Stop a useless idling; (6) Avoid getting congested, have time and leave; (7) Inspection and maintenance of cars start from air pressure in the tires; (8) Removal of unnecessary load from car; (9) Stop parking that disturbs running.; and (10) Understand own fuel cost.
2. ***Measures are in place for eco-drive promotion*** noted in Evaluation Criteria (2) requires the fulfillment of the following:
   a. The driver has been informed of eco-drive.
   b. A manager responsible for eco-drive has been assigned, manual has been created (including the use of an existing manual), and a system for promoting eco-drive has been put in place.
   c. Education and training regarding eco-drive is being performed.
   d. Energy use is being maintained through the maintenance of operation records under the categories of driver and car type.
3. ***Inspection and maintenance of cars*** in Evaluation Criteria (3) refers to the observance of the items outlined in the Regulations for Road Transportation and Delivery, including daily and regular inspections, as well as the establishing and execution of voluntary maintenance standards based on inspection and maintenance factors listed in Table. The objective here is to secure an environment that can maintain energy efficiency in automobiles.
4. ***Measures are put in place for improved efficiency in passenger transportation*** and ***decrease in traveling distance of non-passenger occupied cars*** noted in Evaluation Criteria (4) require the fulfillment of the following
   General charted passenger automobiles must fulfill items a. and b. below.
   a. An energy efficient route is selected beforehand, and the driver is notified thereof.
   b. An appropriate automobile type, taking into account number of passengers to transport and regional characteristics, is selected.

   General passenger automobiles must fulfill item c. below.
   c. Dispatching of automobiles utilizes wireless transmission. Otherwise, a system is put in place that enables communication with the driver through other means of communication or information devices.
5. ***Fuel-efficient, low pollution cars*** noted in Factors for Consideration (2) should be referred to "13-1 Vehicles" section in this Basic Policy.
6. ***Environmental Report*** refers to the environmental report designated by Regulations for Promoting Businesses that Takes into Consideration Environment of Specified Businesses, etc. through Promotion of Environmental Information Provision (2004 Regulation 77) Article 2, Item 4.

Table: Inspection and Maintenance Items for Environmental Preservation, Including Maintenance of Automobile Energy Efficiency, etc.

Promotional structure for inspection and maintenance	
	☐ Inspection and maintenance is conducted in accordance with specified operation plan, and the results are recorded.
	☐ A system is put in place to review the contents of inspection and maintenance, based on the results of inspection and maintenance.
Adequate inspection and maintenance of automobiles	
	■Inspection and maintenance is conducted immediately when the phenomenon with the environmental influence is found by daily understanding the state of the automobiles.
	■ For diesel-fueled automobiles, conduct inspection and maintenance when an increase in black smoke is confirmed by the eye.
	■ When the air-conditioner gas is considered to have decreased, based on the effectiveness of the car air-conditioner, conduct inspection and maintenance of the car air-conditioner, in order to prevent the discharge of chlorofluorocarbon into the atmosphere.
Inspection and maintenance based on voluntary maintenance standards	
	(Air cleaner element-related)
	■ For cleaning and replacement of air cleaner element in diesel-fueled automobiles, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection and maintenance accordingly.
	(Engine oil related)
	■ For the change of engine oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct oil change accordingly.
	■ For the replacement of engine oil filter, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct replacement accordingly.
	(Fuel equipment related)
	☐ For overhauling or replacement of fuel equipment in diesel-fueled automobiles, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct overhaul or replacement accordingly.
	(Related to equipment for the reduction of gas emission)
	■ For the inspection of equipment for the reduction of gas emission (DPF, Oxidized catalyst) in diesel-fueled automobiles, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection accordingly.
	(Others)

	■ For the inspection and adjustment of tire air-pressure, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct adjustment in accordance with the actual measurement of air-pressure.
	□ For the inspection of transmission oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the transmission oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.
	□ For the inspection of deferential oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the deferential oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.

■ refers to items that must be conducted for inspection and maintenance of automobiles.

□ refers to items for which execution is desirable for inspection and maintenance of automobiles.

(2)Target Setting Guideline

Ratio of the number of passenger transportation businesses that meet the criteria to the number of passenger transportation businesses commissioned in the fiscal year.

22-9 Illumination Services

(1) Items and Evaluation Criteria

Fluorescent illumination services	**Evaluation Criteria** The service must be a function supplying service (servicizing) that fulfills the following criteria: (1) Fluorescent light that fulfills the Evaluation Criteria for fluorescent light (refer to ***Lamps*** section) is used as long as it does not cause any issues for objective of use and is suitable for the equipment. (2) The recycle rate of collected used fluorescent lamps that are in its complete form should comprise 95% or more of the collected fluorescent lamps. (3) A certificate for the completion of adequate processing of fluorescent lamp is issued, and presented to the client upon request. **Factors for Consideration** (1) Collection bin for used fluorescent lamps should be capable of recycling in order to decrease environmental load. (2) Collection of used fluorescent lamps will be conducted upon cooperation with facility manager. Efforts should be made to collect without damage. (3) An effective method of distribution network utilizing regular collection, collaborative shipping, etc. is in place for shipping and collecting of fluorescent lamps. (4) Packaging and stowage is as simple as possible, and ease of reuse and decrease in environmental load upon disposal is considered.

Note:

1. ***Function supplying service (servicizing)*** noted in Evaluation Criteria refers to a service in which only the function of the fluorescent lamp is supplied; the ownership of the fluorescent lamp remains with the service provider who remains responsible for transportation, collection and disposal.
2. ***Certificate for the completion of adequate processing of fluorescent lamp*** noted in Evaluation Criteria (3) can be an equivalent of a certificate including electronic manifesto and manifesto management system utilizing IT.

(2)Target Setting Guideline

The total number of function supplying service provider for fluorescent lamps commissioned in the fiscal year.

22-10 Retail Businesses

(1) Items and Evaluation Criteria

Retail businesses that operate in government buildings, etc.	**Evaluation Criteria** Stores for retail businesses that operate through commission in government buildings and associated sites need to fulfill one of the following criteria in order to promote the control of discharge of waste material derived from containers and packaging: (1) An original system is put in place to restrict excessive use of containers and packaging. (2) An original system is put in place to restrict consumers' excessive use of containers and packaging. **Factors for Consideration** Merchandise sold at the stores are possible to return and collect of the containers and packaging to re-use and use reduced amount of containers and packaging through simplified packaging etc.

Note:

1. ***Original system*** noted in Evaluation Criteria (1) refers to measures taken by the retail businesses to promote the control of discharge of waste material derived from containers and packaging through the use of thinner or light weight containers and packaging, choosing adequately-sized containers and packaging for the merchandise, etc.
2. ***Original system*** noted in Evaluation Criteria (2) refers to measures to promote the control of discharge of waste material derived from containers and packaging by the consumers through providing containers and packaging for sold merchandise at a cost, providing reusable shopping bags for those consumers who do not bring their own shopping bags, etc., and confirming with the consumers the retailer's intent concerning the use of containers and packaging.

(2)Target Setting Guideline

The number of retail businesses in operation in government buildings etc., that meet the criteria in the fiscal year.

22-11 Laundry and Dry Cleaning

(1) Items and Evaluation Criteria

Laundry and dry cleaning	**Evaluation Criteria** (1) Measures are put in place for energy conservation and the water resource saving, etc, collecting and recycling of the drain water for reduction of environmental impact. (2) Measures are put in place for eco-drive promotion. (3) A system for collection and reuse or recycling of used hangers is established. **Factors for Consideration** (1) Control of volatile organic material is taken into consideration. (2) Efforts must be made for the adequate use of laundry water and detergent. (3) Maintain an understanding of energy use conditions at business and sales offices, and make an effort to decrease energy use rate in said facilities. (4) Incorporation of fuel-efficient, low pollution cars is promoted. (5) Maintain an understanding of reduction of package (poly packing material and bags, etc.). (6) The introduction in the cleaning equipment, the machine, and air conditioning facilities, etc. of the energy conservation type must be attempted.

Note:

1. ***Laundry and dry cleaning*** under consideration in the Evaluation Criteria in this section denotes the cleaning business, based on the Law of cleaning business (Act No.207 of 1950). However, Evaluation Criteria in this section is not applied to the cleaning of the product that the procurement destination does concerned when procuring as other items such as “Blankets”, “Comforters”, and “Mops” by lease or rental agreements.
2. ***Drain water*** means the steam (saturated steam) is the one that the state changed into the flocculated water by radiating heat and using heat.
3. ***Eco-drive*** refers to “Recommendation for Eco-drive 10” published by Eco-drive Popularization Network (October 2012).
   Note: (1) Soft accelerator ***e-start***; (2) Keep a distance between cars and driving with little acceleration and deceleration; (3) Early stopping of acceleration when deceleration; (4) Appropriate use of air conditioner; (5) Stop a useless idling; (6) Avoid getting congested, have time and leave; (7) Inspection and maintenance of cars start from air pressure in the tires; (8) Removal of unnecessary load from car; (9) Stop parking that disturbs running.; and (10) Understand own fuel cost.
4. ***Measures are in place for eco-drive promotion*** noted in Evaluation Criteria (2) requires the fulfillment of the following:
   a. The driver has been informed of eco-drive.
   b. A manager responsible for eco-drive has been assigned, manual has been created (including the use of an existing manual), and a system for promoting eco-drive has been put in place.

c. Energy use is being maintained under the categories of driver and car type. It is desirable to use the operation records of automobile.

5. ***A system for collection and reuse or recycling of used hangers is established*** denotes fulfillment of the below requirements.

a. Specific information for the collection of used hanger (collection method, collection location, etc.) is available for the users to collect appropriately.

b. A system is in place to wash and reuse used hangers.

c. If collected plastic hangers are enable to reuse, it must be material recycled as much as possible.

6. ***Fuel-efficient, low pollution cars*** refer to "13-1 Vehicles" section**.**

(2)Target Setting Guideline

Ratio of the number of laundry and dry cleaning businesses that meet the criteria to the number of laundry and dry cleaning businesses commissioned in the fiscal year.

22-12 Installation of Vending Machines

(1) Items and Evaluation Criteria

Installation of vending machines for beverages	**Evaluation Criteria** (1) Energy consumption efficiency don't exceed the amount of energy consumption efficiency calculated by using the formula listed in Table 1 for each category. (2) Fluorocarbons are not used as refrigerant or expanding agent for insulation. (3) The implementations of environmentally conscious design defined in evaluation criteria in Table 2 are made. Moreover, the states of implementations are published and can be easily confirmed on websites or public environmental reports. (4) Contents of specified chemical substances do not exceed the standard content rate. The content rates are published and can be easily confirmed on websites, etc. (5) Systems for the collection and recycle of used vending machines and for the appropriate disposal of parts that cannot be recycled are in place. **Factors for Consideration** (1) The information such as annual power consumption, accomplishment rate of energy consumption efficiency standard and refrigerant (kind, global warming potential and enclosed capacity) are displayed on the main body of vending machine so that it can be seen easily and it is also disclosed on websites. (2) In the case of indoors set up, the lighting should be turned off all the time, except when there is no lighting in surroundings at nighttime and it interferes to the selection and the purchase of the commodity. (3) In the case of outdoors set up, the consideration should be taken so that direct sunshine should not strike into the main body of vending machines. (4) For vending machines for beverage served in cups, user's own cup should be available. (5) The heat insulator with a low thermal conductivity such as the vacuum heat insulators should be used. (6) A collection box for beverage containers is set up annex with the vending machine. Separate collection and recycling should be done according to the material of beverage containers. (7) Take measures such as using fuel-efficient vehicles with low pollution and improving the efficiency of delivery when setup or recovery of the vending machines and replenishing beverages or collection of containers. (8) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (9) A system for the collection and reuse/recycling of packaging, etc.

	is considered.

Note:

1. ***Installation of vending machines for beverages*** under consideration in this section refer to those for canned/bottled beverages, those for beverage in paper containers, and those for beverage served in cups. However, it doesn't apply to installation of the one as follows:
    a. Those having a storage space for goods kept at or near room temperature.
    b. Compact table-top models used on tables.
    c. Those intended to be used at specific places such as in vehicles.
    d. Those cooling beverages (raw materials) by means of an electronic cooling. (e.g., Peltier cooling)
2. Evaluation Criteria in this section doesn't apply if there will be no replacement of the vending machines in the cases duration of the installation contract, etc. or in the cases of renewal of the contract, etc.
3. Evaluation Criteria (1) doesn't apply to vending machines for the ones preparing for a disaster, the universal design vending machines, and the social contribution type vending machines, which increases power consumption by having those functions.
4. ***Fluorocarbons*** are the materials defined as the Fluorocarbons prescribed in Article 2, Paragraph 1 of the Act for Rationalized Use and Proper Management of Fluorocarbons, (Act No. 64 of 2001). Available materials in Evaluation Criteria (2) are Carbon Dioxide, Hydrocarbon and Hydro-Fluoro-Olefin (HFO-1234fy), etc.
5. Evaluation Criteria (2) doesn't apply those for beverages in paper containers and beverages served in cups. However it must not include material harm ozone layer and shall be used low global warming potential material as possible.
6. ***Global warming potential*** denotes the numerical value that showed degree to which heat-trapping gas brings global warming in ratio to which carbon dioxide brings global warming.
7. ***Specified chemical substances*** denotes lead and its compounds, mercury and its compounds, cadmium and its compounds, chromium (VI) compound, polybrominated biphenyl and polybrominated diphenyl ether.
8. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950:2008 (The marking for presence of the specific chemical substances for electrical and electronic equipment) Appendix A, chart A.1 (specified chemical substances, chemical element symbol, substances applicable for calculation, and standard content rate). Items for which content rate exceeding the standard is allowed are to be determined in accordance with Appendix B of the above JIS.
9. ***Accomplishment rate of energy consumption efficiency standard*** denotes the numerical value that showed by percentage which the product's standard energy consumption efficiency calculated by Evaluation Criteria (1) divided by the energy consumption efficiency (rounds off below the decimal point.).
10. Each procurement organization is to take the following into careful account:
    a. Consider enough the number of consumers and the volume of sales, etc. and set up the vending machines adequate in number and size.
    b. Examine where to place vending machines so that the environmental

impact is as low as possible because the load of environmental impact such as energy consumption varies according to the installation location (indoor, outdoor, sun or shade, etc.).

c. When setting up the vending machine available of user's own cups, confirm the cleaning and hygienic conditions in the set up location and the surroundings, make it known to users, and determine responsibility in case the problem on the hygiene is caused.

Table1: Calculation Formula of Standard Energy Consumption Efficiency for Vending Machines for Beverages

Category			Calculation formula of standard energy consumption efficiency
Beverages to be sold	Type of Vending machines		
Canned or bottled beverages	Machines serving cold only, or Machines serving hot or cold		E=0.218V+401
	Machines serving hot and cold (Internal depth is below 400 mm)		E=0.798Va+414
	Machines serving hot and cold (Internal depth is 400mm or greater)	Without electronic money processing Device	E=0.482Va+350
		With electronic money processing Device	E=0.482Va+500
Beverages in paper container	Type A (Dummy samples are used for selling goods)	Machines serving cold only	E=0.948V+373
		Machines serving hot and cold (having two internal compartments)	E=0.306Vb+954
		Machines serving hot and cold (having three internal compartments)	E=0.63Vb+1474
	Type B (Actual goods are used for visual display and selling goods)	Machines serving cold only	E=0.477V+750
		Machines serving hot and cold	E=0.401Vb+1261
Beverages served in cups	—		E=1020[T<1500] E=0.293T+580[T>1500]

Note:

1. ***Machines serving cold only*** refers to vending machines that refrigerate the products sold.
2. ***Machines serving hot or cold*** refers to vending machines that refrigerate or warm the products sold.
3. ***Machines serving hot and cold*** refers to vending machines which have warm section and cold section separated by internal partitions, so that the products sold are kept refrigerated or warmed respectively.
4. E, V, and Va express the following numeric values.
   E : Standard energy consumption efficiency (unit: kWh per year)
   V : Actual internal volume (indicates the numeric value calculated from the internal dimensions of the goods storage area) (unit: liter)
   Va : Adjusted internal volume (indicates numeric value acquired first by multiplying the actual internal volume of the hot storage compartment by 40,

which is divided by 11, and then by adding the result to the actual internal volume of the cold storage compartment) (unit: liter)

Vb : Adjusted internal volume (numeric value acquired first by multiplying the actual internal volume of the hot storage compartment by 40, which is devided by 10, and then by adding the result to the actual internal volume of the cold storage compartment) (Unit: L)

T : Adjusted heat capacity (numeric value obtained by totaling the hot-water tank capacity multiplied by 80, the cold-water tank capacity multiplied by 15, and the ice storage capacity multiplied by 95 and then divided by 0.917, and then multiplying the total sum by 4.19. (Unit: kJ)

5.Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," in Ministry of Economy, Trade and Industry notification No.289 (November 26, 2007), based on the Law Concerning the Rational Use of Energy.

Table2: Design Criteria for Environmental Consideration in Vending Machine for Beverages

Objective	Evaluation criteria	Evaluation standard
Reduce(reduction of resources)	Reduction of resource	The weight of product is reduced.
	Using of recycled materials	Promotion of the use of recycled materials.
	Longer life of product	Consideration for overhauling and renewal.
		Consideration and improvement for the separation.
		Consideration for repair and maintenance.
	Reduction of energy power consumption	The energy power consumption of product is reduced. Attempt is made for developing low energy consumption technology.
Reuse(use again as parts)	Selection of reused parts	Consideration for communalization or standardization, selecting of reused parts from design stage.
	Consideration for products	Consideration for separation and assembling of reusable parts.
	Design for parts reuse	Consideration for ease of display, cleaning and washing, determination of longevity.
Recycling(use again as materials)	Material	Selection of recyclable materials.
		Standardization and indication of materials of kind of plastics.
		Reduction of use of parts of difficult to recycle.
	Consideration of ease of separation	The structure allows for easy dismantling of pre-separation parts.

(2)Target Setting Guideline

Ratio of the number of installation of vending machines for beverages installation by contract or licensing agreement that meet the criteria to the number of vending machines for beverages commissioned in the fiscal year.

22-13 Moving Transportation

(1) Items and Evaluation Criteria

Moving Transportation	**Evaluation Criteria** (1) As for products used for packing or curing, when applicable to the designated procurement items, must be used which fulfill those evaluation criteria. (2) Materials for packing and curing that can be used repetitive must be used. (3) The collection of materials for packing must be executed after the moving ends. (4) In the case of transportation with a car, must fulfill following criteria. a. The state of energy use, as well as the effects of energy efficiency efforts are being reviewed periodically. b. Measures are in place for eco-drive promotion. c. Inspection and maintenance of cars for environmental protection including reduction of environmental pollutant emission and maintenance of energy efficiency is being conducted. **Factors for Consideration** (1) The appropriate proposal concerning the moving transportation method must be made to contribute to decrease of environmental load. (2) As for packing and curing, must be execute for saving resource such as aggregate packing or reduction of materials use and concerning use of recycled material, also taking into consideration for ease of recycling and environmental load upon disposal. (3) In the case of transportation with a car, taking into consideration of following. a. Adequate and effective application for the efficient use of energy and measures to contribute to leveling of demand for electricity in moving transportation is arranged, with consideration for "Evaluation Criteria for Freight Transportation Companies in Relation to the Efficient use of Energy in Freight Transportation (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notification No.7 (March 31, 2006)) and "Guidelines for Freight Transportation Companies in Relation to the measures to contribute to leveling of demand for electricity in Transportation" (Ministry of Economy, Trade and Industry; Ministry of Land, Infrastructure and Transport, Notice No.2 (January 17, 2014)), based on the Regulation for the Efficient Use of Energy (Act No.49 of 1979). b. Incorporation of fuel-efficient, low pollution cars are promoted. At the same time, transportation using

	fuel-efficient, low pollution cars is being conducted as much as possible. c. Measures are put in place for improved efficiency in moving transportation. d. Devices to promote eco-drive are introduced as much as possible. e. Measures are taken for the incorporation of Intelligent Transport System (ITS) including Vehicle Information and Communication System (VICS) adaptable car navigation system, and Electronic Toll Collection System (ETC). f. Being conducted by car fills the emission standard as much as possible, when driving in the measures region of the Law concerning Special Measures for Total Emission Reduction of Nitrogen Oxides and Small Particles from automobiles in specified areas (June 3, 1992 No.70).

Note:

1. ***Moving transportation*** under consideration in the evaluation criteria in this section denotes moving transportation business of the fixture and furniture, the article, and the document, etc., and service of packing, unpacking, arrangement, and care, etc. incidental to those, according to the moving of the public office building, etc. (includes the moving between the public office buildings, the moving within the public office building, and the moving in the floor of the public office building.) However, the moving transportation to need special packing, transportation, and the management, etc. such as the work of art, the precision instrument, and animals and plants is excluded.
2. Evaluation Criteria (3) applies when packing materials made of paper such as cardboards are offered by the business provider, and executes the collection according to purchaser's request. However, provide the collection time limit and the frequency beforehand.
3. Evaluation Criteria (4) and Factors for Consideration (3) are applied to the business who does transportation using the car, regardless of the main contractor or subcontract of the moving transportation business.
4. ***Eco-drive*** refers to "Recommendation for Eco-drive 10" published by Eco-drive Popularization Network (October 2012).
   Note: (1) Soft accelerator ***e-start***; (2) Keep a distance between cars and driving with little acceleration and deceleration; (3) Early stopping of acceleration when deceleration; (4) Appropriate use of air conditioner; (5) Stop a useless idling; (6) Avoid getting congested, have time and leave; (7) Inspection and maintenance of cars start from air pressure in the tires; (8) Removal of unnecessary load from car; (9) Stop parking that disturbs running.; and (10) Understand own fuel cost.
5. ***Measures are in place for eco-drive promotion*** noted in Evaluation Criteria (4) b. requires the fulfillment of the following:
   a. The driver has been informed of eco-drive.
   b. A manager responsible for eco-drive has been assigned, manual has been created (including the use of an existing manual), and a system for promoting eco-drive has been put in place.
   c. Education and training regarding eco-drive is being performed.
   d. Energy use is being maintained through the maintenance of operation

records under the categories of driver and car type.

6. ***Inspection and maintenance of cars*** in Evaluation Criteria (4) c. refers to the observance of the items outlined in the Regulations for Road Transportation and Delivery, including daily and regular inspections, as well as the establishing and execution of voluntary maintenance standards based on inspection and maintenance factors listed in Table. The objective here is to secure an environment that can maintain energy efficiency in automobiles.
7. ***The appropriate proposal concerning the move transportation method*** of Factors for Consideration (1) applies to the contract type when the concrete suggestion is possible.
8. ***Fuel-efficient, low pollution cars*** in Factors for Consideration (3) b. should be referred to "13-1 Automobiles" in this Basic Policy.
9. ***Measures are put in place for improved efficiency in moving transportation*** noted in Factors for Consideration (3)c. requires the fulfillment of the following:
    a. An energy efficient delivery route is selected beforehand, and the driver is notified thereof.
    b. A system for an appropriate delivery route, taking into account traffic information, is put in place.
    c. An adequate automobile type, taking into account amount of delivery items and regional characteristics, is selected.
10. Each procurement organization must note the following enough.
    a. It is necessary to consign the following respectively when collection, transport or disposal of the waste generated along with the moving is requested from the third party; The municipal waste to the municipality or the municipal waste disposal business person (The one that corresponds to Article 2, paragraph 1 and Article 2-3, paragraph 1 in the Waste Management and Public Cleaning Law Ordinance for Enforcement is included.), Industrial waste to the industrial waste disposal trader (The one that corresponds to Article 9, paragraph 1 and Article 10-3, paragraph 1 in the Waste Management and Public Cleaning Law Ordinance for Enforcement is included.). It is possible to request the collection or the transportation of the municipal waste from the moving business after the letter of attorney is delivered.
    b. It is necessary to follow the consignment standard when collection, transportation or disposal of the waste along with the moving transportation business is consigned, and to contract industrial waste to the industrial waste disposal contractor who consigns the industrial waste collection transportation trader and disposal that consigns the collection or transportation beforehand, with confirm the address and the disposal method of the industrial waste disposal facility that is the transportation destination also. Moreover, it is necessary to confirm the address in the final disposal dump when it is disposed finally. It is preferable to do the confirmation of the municipal waste based on industrial waste.
    c. In the delivery of waste, about industrial waste, it is necessary to confirm transportation by delivering the control manifest for industrial waste at the same time as handing it over, and receiving sending the copy of the control manifest for industrial waste that described from the processing trader so after transportation and disposal are ended like the content of the consignment it, and disposal. Moreover, it is preferable to do the

confirmation of the municipal waste based on industrial waste.

Table: Inspection and Maintenance Items for Environmental Preservation, Including Maintenance of Automobile Energy Efficiency, etc.

Promotional structure for inspection and maintenance	
	□ Inspection and maintenance is conducted in accordance with specified operation plan, and the results are recorded.
	□ A system is put in place to review the contents of inspection and maintenance, based on the results of inspection and maintenance.
Adequate inspection and maintenance of automobiles	
	■ When commissioning inspection and maintenance to a maintenance business, maintain an understanding of the automobile condition on a daily basis, and relay the condition when commissioning.
	■ Conduct inspection and maintenance when an increase in black smoke is confirmed by the eye.
	■ When the air-conditioner gas is considered to have decreased, based on the effectiveness of the car air-conditioner, conduct inspection and maintenance of the car air-conditioner, in order to prevent the discharge of chlorofluorocarbon into the atmosphere.
Inspection and maintenance based on voluntary maintenance standards	
	(Air cleaner element-related)
	■ For cleaning and replacement of air cleaner element, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection and maintenance accordingly.
	(Engine oil related)
	■ For the change of engine oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct oil change accordingly.
	■ For the replacement of engine oil filter, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct replacement accordingly.
	(Fuel equipment related)
	□ For overhauling or replacement of fuel equipment, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct overhaul or replacement accordingly.
	(Related to equipment for the reduction of gas emission)
	■ For the inspection of equipment for the reduction of gas emission (DPF, Oxidized catalyst), refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the

	distance driven or the amount of time that has passed since the previous maintenance. Conduct inspection accordingly.
	(Others)
	■ For the inspection and adjustment of tire air-pressure, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct adjustment in accordance with the actual measurement of air-pressure.
	□ For the inspection of transmission oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the transmission oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.
	□ For the inspection of deferential oil leakage, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct maintenance accordingly.
	□ For changing the deferential oil, refer to the maintenance notebook, etc. provided by the manufacturer, and determine a voluntary maintenance standard based on either the distance driven or the amount of time that has passed since the previous maintenance. Conduct change accordingly.

■ refers to items that must be conducted for inspection and maintenance of automobiles.

□ refers to items for which execution is desirable for inspection and maintenance of automobiles.

(2)Target Setting Guideline

Ratio of the number of moving transportation businesses that meet the criteria to the number of moving transportation businesses commissioned in the fiscal year.

22-14 Meeting Operation

(1) Items and Evaluation Criteria

Meeting Operation	**Evaluation Criteria** Meet the applicable following criteria when executing the business including meeting operation by the consignment contract, etc. (1) If the documents are distributed, to promote reduction of paper consumption though the printing of proper number of paper handouts and double-sided copies for a meeting. If the paper correspond to the designated procurement items, must be used which fulfill those evaluation criteria. (2) Meet the Evaluation Criteria of ***printing*** when printing such as poster, leaflet and pamphlet. **Factors for Consideration** (1) The rest of handouts and printed matter shall be recycled if unnecessary. (2) If serving beverages, those containers and packaging shall be returned and collected. It is preferable to be served in the reusable containers and packaging as possible. (3) In the case of transportation with a car, use fuel-efficient, low pollution cars possibly, to carry material, machinery and participants, with eco-driving. (4) Providing information about the approach to decrease of environmental load to the meeting participant, such as the use of the public transportation facility and encouragement of Cool Biz and Warm Biz. (5) Materials for the packing used to transport of the material and machinery, it is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal.

Notes:

1. ***Fuel-efficient, low pollution cars*** in Factors for Consideration should be referred to ***13-1. Vehicles*** in this Basic Policy.
2. ***Eco-drive*** refers to "Recommendation for Eco-drive 10" published by Eco-drive Popularization Network (October, 2012).

   Note: (1) Soft accelerator e-start; (2) Keep a distance between cars and driving with little acceleration and deceleration; (3) Early stopping of acceleration when deceleration; (4) Appropriate use of air conditioner; (5) Stop a useless idling; (6) Avoid getting congested, have time and leave; (7) Inspection and maintenance of cars start from air pressure in the tires; (8) Removal of unnecessary load from car; (9) Stop parking that disturbs running.; and (10) Understand own fuel cost.

(2)Target Setting Guideline

Ratio of the number of commissioned businesses including the meeting operation that meet the criteria to the total number of commissioned businesses including the meeting operation contracted in the fiscal year.