Basic Policy on Promoting Green Procurement
(Provisional Translation)

February2020

Table of Contents

1. Basic Policy on Promoting Green Procurement by the Government and Incorporated Administrative Agencies ……..1
2. Designated Procurement Items, Evaluation Criteria, and Basic Matters Relating to the Procurement of their Purchase……...……...……..…….4
3. Other Important Matters Regarding Green Procurement…...…….……..……7

Appendix……9
   1. Terminology……...9
   2. Paper……9
   3. Stationery……18
   4. Office Furniture, etc……..…28
   5. Imaging Equipment,etc.……..…32
      5-1 Copiers, etc……32
      5-2 Printers, etc.…….…….….43
      5-3 Fax Machines…….52
      5-4 Scanners……..…56
      5-5 Projectors…….…….….59
      5-6 Cartridges, etc.…….……..… 62
   6. Computers, etc…….68
      6-1 Computers…….…… 68
      6-2 Magnetic Disc Drive Units……80
      6-3 Displays…….83
      6-4 Recording Medias……..…88
   7. Office Equipment, etc…….90
      7-1 Paper Shredders……90
      7-2 Digital Duplicators...……92
      7-3 Clocks…….…….…….…….…95
      7-4 Electronic Table Calculators.……96
      7-5 Batteries...…….97
   8. Mobile Telephones, etc.…..……99
   9. Home Electronic Appliances……103
      9-1 Electric Refrigerators, etc.……103
      9-2 Television Receivers……107
      9-3 Electric Toilet Seats…….111
      9-4 Microwave Ovens..……..113
   10. Air Conditioners, etc....…..…….115
      10-1 Air Conditioners..…..…….115
      10-2 Gas Heat Pump Air Conditioners…….119
      10-3 Space Heaters…….……...……120
   11. Water Heaters, etc.…….……122
      11-1 Electric Hot Water Supply Systems……122
      11-2 Gas Water Heaters…….……125
      11-3 Oil Water Heaters…….…….128
      11-4 Gas Cooking Appliances…..…….130
   12. Lighting. …….…….…….…….133
      12-1 Lighting Equipment……133

12-2 Lamps……137
13. Vehicles, etc.……141
13-1 Vehicles..……141
13-2 Tires.……151
13-3 Engine Oil……152
14. Fire Extinguishers……153
15. Uniforms and Work Clothes, etc……155
16. Interior Fixtures and Bedding……159
16-1Curtains, etc……159
16-2 Carpets..……162
16-3 Blankets, etc..……164
16-4 Beds...……167
17. Work Gloves……171
18. Other Textile Products……172
18-1 Tents and Sheets……172
18-2 Safety Nets……174
18-3 Flags, Advertisement Flags, and Banners, etc.……176
18-4 Mops..……178
19. Facilities...……180
20. Stockpiles for Disaster……191
20-1 Stockpiles for disaster (Potable Water)……191
20-2 Stockpiles for disaster (Foods)……192
20-3 Stockpiles for disaster (Household items and materials, etc.)……194
21. Public-Works Projects.……202
22. Services.……241
22-1 Energy Conservation Diagnosis……241
22-2 Printing……242
22-3 Cafeteria..……255
22-4 Recapped Automobile Tires……257
22-5 Automobile Maintenance……258
22-6 Management of Government Office Buildings, etc..……260
22-7 Transportation and Delivery……284
22-8 Passenger Transportation……289
22-9 Illumination Services.……293
22-10 Retail Businesses..……294
22-11 Laundry and Dry Cleaning……296
22-12 Installation of Vending Machines……298
22-13 Moving Transportation……304
22-14 Meeting operation……309
22-15 Providing imaging equipment, etc., as a service ……311
23. Trash bags, etc.……314

Fields and Items of Designated Procurement Items [22 fields 275 items]

Paper	*Copier paper * Forms * Coated inkjet color printer paper * Non coated printing paper * Coated printing paper * Toilet paper * Tissue paper
Stationery	* Mechanical pencils * Mechanical pencil lead * Ball-point pens * Marking pens * Pencils * Ink pads * Vermilion ink pads * Stamp case with inkpad * Stamp case * Official seal * Rubber stamp * Date stamp * Rulers * Trays * Erasers * Staplers(general-purpose type) * Staplers(other than general-purpose type) * Staple removers * Clamp-on clip dispensers(main body) * Correction tape * Correction fluid * Masking tape * Adhesive tapes (cloth tape) * Double sided tapes * Book binding tapes * Bookstands * Pen stands * Clip cases * Scissors * Magnets (ball) * Magnets (bar) * Tape cutters * Hole punchers (manual) * Malt cases (sponge case) * Paper turning cream * Pencil sharpeners(manual) * Office machine cleaner (wet paper type) * Office machine cleaner (liquid type) * Dust blowers * Letter cases * Media cases * Mouse pads * Office machine filters (with frame) * Paper cutters with round blades * Box cutters * Cutting mats * Desk pads * OHP film * Paint brushes * Paints * India ink * Glue (liquid)(including refills) * Glue (paste)(including refills) * Glue (solid)(including refills) * Glue (tape) * Files * Binders * Filing supplies * Photo albums(including refills) * Binding string * Card cases * Business envelopes (paper product) * Envelopes with windows (paper product) * Graph paper * Drafting paper * Notebooks * Reinforcement labels for hole-punch pages * Adhesive labels * Indexes * Self-stick removable notes * Self-stick removable film * Blackboard erasers * Whiteboard erasers * Picture frames * Waste bins * Recycling boxes * Can and bottle crushers (manual) * Name plates (desktop) * Name tags (pin or string) * Key hooks * Chalks * Line marking powder* Packing straps
Office Furniture, etc.	* Chairs * Desks * Shelves * Storage furniture (without shelf) * Low partitions * Coat hangers * Umbrella stands * Bulletin boards * Blackboards * Whiteboards
Imaging Equipment, etc.	* Copiers * Multifunction devices * Upgradeable digital copiers * Printers * Multifunction Printers * Fax machines * Scanners * Projectors * Toner cartridges * Ink cartridges
Computers, etc.	* Computers * Magnetic disk drive units * Displays * Recording medias
Office Equipment, etc.	* Paper shredders * Digital duplicators * Clocks * Electronic table calculators * Disposable batteries and small rechargeable batteries
Mobile Telephones, etc.	* Cellular phones * PHS * Smart Phones
Home	* Electric refrigerators * Electric freezers

Electronic Appliances	* Electric refrigerator- freezers * Television Receivers * Electric toilet seats * Microwave ovens
Air Conditioners, etc.	* Air conditioners * Gas heat pump air conditioners * Space heaters
Water Heaters, etc.	* Heat pump style electric hot water supply system * Gas water heaters * Oil water heaters * Gas cooking appliances
Lighting	* LED lighting equipment * Illuminated signage using LED as the light source * Fluorescent lamps (tube type 40 fluorescent lamps) * Light bulb-shaped lamps
Vehicles	* Vehicles * Tires for passenger cars * 2 cycle engine oil
Fire Extinguishers	* Fire extinguishers
Uniforms and Work Clothes, etc.	* Uniforms * Work clothes * Caps *Shoes
Interior Fixtures and Bedding	* Curtains * Cloth blinds * Metal blinds * Tufted carpets * Tile carpets * Woven carpets * Needle-punch carpets * Blankets * Comforters * Bed frames * Mattresses
Work Gloves	* Work gloves
Other Textile Products	* Tents * Tarps * Safety nets * Flags * Advertisement flags * Banners * Mops
Facilities	* Solar power generation systems (for public and industrial use) * Solar heating systems (for public and industrial use) * Fuel cells * Garbage disposals * Water saving equipment * Sunlight adjustment film
Stockpiles for Disaster	* PET bottled water * Quick cooking rice * Non-perishable bread for an emergency * Pilot bread * Retort processed food, etc. * Health foods/Nutrition foods * Freeze-dried foods * Emergency portable fuel * Portable generators * Portable power supply for emergency ** Blankets ** Work gloves ** Tents ** Tarps ** Disposable batteries Note:**The same items as the other fields
Public-Works Projects	＜Material＞ * Treated soil recycled from construction sludge * Granulated blast furnace slag for earth work * Caisson filler using copper slag * Caisson filler using ferro-nickel slag * Steel slag for Ground improvement * Blast furnace slag aggregate * Ferro-nickel slag aggregate * Copper slag aggregate * Electric arc furnace oxidizing slag aggregate * Recycled heated asphalt compound * Asphalt compound with steel slag * Warm asphalt compound * Roadbed material with steel slag * Recycled aggregate, etc. * Lumber from thinning

	* Portland blast furnace cement * Fly-ash cement * Eco-cement * Water permeable concrete * Steel slag block * Spray on concrete with fly-ash * Base-coating paint (anti corrosive) * Water based road paint using low volatility organic solvent * High solar reflectance paints * High solar reflectance water proof * Pavement blocks using recycled material (burnt) * Pavement block products using recycled material (precast unreinforced concrete products) * Bark compost * Fermented compost using sewage sludge (sewage sludge compost) * LED road illuminations * Central divider block manufactured with recycled plastic * Ceramic tiles * Heat insulating sash, doors * Lumber * Glued laminated timber * Plywood * Laminated veneer lumber *Cross Laminated timber * Flooring * Particle board * Fiberboard * Wood-type cement board * Wood-plastic recycled composite * Vinyl floor covering * Insulation * Lighting control system * Transformers * Cold and hot water absorption units * Ice thermal storage air conditioning units * Gas heat pump air conditioning units * Fan * Pump * Recycle unplasticized polyvinyl chloride pipes for sewage or vent * Automatic shut off faucets * Toilet and urinal equipped with automatic flushing system * Toilet bowls * Form utilizing recycled material * Plywood form [Construction machines] * Low-emission construction machines * Low-noise construction machines [Construction methods] * Effective usage of low quality soil * Recycling treatment of construction sludge * Recycling treatment of concrete masses * Road surface recycling method * Roadbed recycling method * Slope surfaces greening method using thinning wood or soil obtained from construction process * Soil cement pillar line wall method of reducing mad [Others] * Porous pavement * Permeable pavement * Greening of rooftops
Services	* Energy conservation diagnosis * Printing * Cafeteria * Recapped automobile tires * Automobile maintenance * Management of government office buildings * Landscape management * Smoke detectors test * Cleaning * Carpet tile cleaning * Treatment of confidential documents * Pest prevention * Transportation and delivery

	* Passenger transportation (Automobiles) * Fluorescent illumination services * Retail businesses that operate in government buildings, etc. * Laundry and dry cleaning * Installation of vending machines for beverages * Moving Transportation *Meeting Operation * Providing imaging equipment, etc., as a service
Trash Bags, etc.	* Plastic Trash Bags

Basic Policy on Promoting Green Procurement

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 Agencies”) 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 Procurement by the Government and Incorporated Administrative Agencies

1.1 Background and Significance of the Promotion of Green Procurement

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 procurement 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 addition, global warming is recognized as a problem related to the existence basis of human beings, from the magnitude and seriousness of its expected influence, and it is one of the most important environmental problems. Therefore, in view of the importance of countermeasures against global warming, based on the "Global Warming Countermeasure Plan" (Cabinet decision on May 13, 2016)) and "The Government Action Plan "(Cabinet decision on May 13, 2016), the State and Other Entities need to take the initiative to procure eco-friendly goods.

1.2 Basic Approach toward the Promotion of Green Procurement

Each fiscal year, each institution of the government (hereinafter referred to as “each institution”) shall formulate and publish a green procurement 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 Procurement”) 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 procurement 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 need to be considered when making procurement 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 procurement decisions.

(3) Respecting Article 11 of Act on Green Procurement, each institution shall take care that the purchase of environmental goods and services based on Act on Green Procurement does not increase the total procurement amount of goods and services. Each institution shall strive to use goods and services reasonably in order to keep the total procurement 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 procurement 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 procurement 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. In establishing such matters, from the viewpoint of promoting procurement based on higher environmental performance, a plurality of reference values are set in the same matter as necessary.

In establishing such matters, from the viewpoint of promoting procurement based on higher environmental performance, a plurality of reference values are set in the same matter as necessary.

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 procurement. 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 Procurement. For the numerical value set in the evaluation criteria, "reference value 1" is set as one that indicates higher environmental performance, and "reference value 2" is set as the minimum to be satisfied. Each organization shall promote procurement based on "reference value 1" as much as possible and it is expected that transition from "reference value 2" to" reference value 1" will proceed at an early stage.

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 procurement 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 procured 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 Procurement, 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 procurement 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 Procurement

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 procurement. (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 procurement promotion system in its procurement 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 procurement, 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 procurement, 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 procurement 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 procurement so as to facilitate green procurement effectively.

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

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 procurement.

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 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 procurement 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” “reference value 1” “reference value 2” 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.

Reference value 1
When multiple criteria to the same matter are set in the evaluation criteria, it is a value of higher environmental performance in that matter and is indicated as a criteria to promote procurement as much as possible.

Reference value 2
Indicated as the minimum level standard for procurement at each institution when multiple criteria are set for the same items in the evaluation criteria.

Factors for Consideration
While not criteria required for specified procurement goods, these factors should preferably be taken into account when procuring eco-friendly goods.

2. Paper

(1) Items and Evaluation Criteria

Printing Paper

Non coated printing paper Coated printing paper	**Evaluation Criteria** (1) 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 is 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber 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 is 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber 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 by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with a small diameter. (3) The composite rating and its breakdown (index or additional rating, as well as rating for each index item) are 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 was produced from forests that are operated using sustainable methods. The content of pulp certified by forest certification system and pulp manufactured with lumber 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.

Notes:

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 from thinning and others*** denotes lumber from thinning and bamboo.
3. ***Index item*** denotes content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber 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 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 × 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 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) × (100-x1)

   x3: content ratio of pulp manufactured with lumber from thinning and others (%)

   x3= (pulp manufactured with lumber from thinning and others / virgin pulp) × (100-x1)

   x4: content ratio of pulp that satisfy other sustainable goals (%)

   x4= (pulp that satisfy other sustainable goals / virgin pulp) × (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, as for Wood-related Entities, to be conducted in accordance with Clean Wood Act and the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline.
8. Confirmation of lumber 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 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 from thinning and others are determined for each product, in accordance with 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.

Information Paper

Copier paper	**Evaluation Criteria** (1) The composite rating obtained by using the following numbers in the formula in note 5 is 80 or higher: content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber 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 by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with a small diameter. (3) The composite rating and its breakdown (index or additional rating, as well as rating for each index item) are listed on the product. When it is not possible to list the rating and its breakdown on the product, the information is 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 was produced from forests that are operated using sustainable methods. The content of pulp certified by forest certification system and pulp manufactured with lumber 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.

Notes:

2. ***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).
3. ***Lumber from thinning and others*** denotes lumber from thinning and bamboo.
4. ***Index item*** denotes content of recycled pulp, pulp certified by forest certification system, pulp manufactured with lumber 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 from thinning and others.
5. ***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.

6. 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 × 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 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) × (100-x1)

x3: content ratio of pulp manufactured with lumber from thinning and others (%)

x3 = (pulp manufactured with lumber from thinning and others/ virgin pulp) × (100-x1)

x4: content ratio of pulp that satisfy other sustainable goals (%)

x4 = (pulp that satisfy other sustainable goals / virgin pulp) × (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.

7. 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.
8. 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.
9. Confirmation of the legality and the sustainability of the forest where pulpwood producing paper originates from is, for Wood-related Entities, to be conducted in

accordance with "the Act on Promotion of Use and Distribution of Legally-Harvested Wood and Wood Products (Act No.48 of 2016. hereinafter "Clean Wood Act".)" and 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)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline.

10. Confirmation of lumber 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)."
11. 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 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 from thinning and others are determined for each product, in accordance with 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 by using recycled wood pieces obtained from plywood or lumber factories, material left over from forestry, or lumber with a 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. The content of pulp certified by forest certification system and pulp manufactured with lumber from thinning and others are to be as high as possible. (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 by using recycled wood pieces obtained from plywood

	or lumber factories, material left over from forestry, or lumber with a 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) The recycled pulp content is as high as possible. (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. The content of pulp certified by forest certification system and pulp manufactured with lumber 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.

Notes:

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

(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 manufacture	***Paper industry (142)*** specified in a middle classification by a 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 （1963 Ministry of Finance Ordinance No.59）*** 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 meets, of the criteria below, (1) for plastic, (2) for wood, and (3) for paper. In addition, items whose secondary material includes wood meets (2). Items whose secondary material include paper (with the exception of virgin pulp manufactured with lumber from thinning, or with recycled wood pieces obtained from plywood or lumber factories) meet (3)b. This does not apply to virgin pulp manufactured with lumber 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 a small diameter. (1) Recycled plastic makes up no less than 40% in weight of the total plastic used or plant based plastics whose reduction effect of environmental load has been confirmed used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 20 wt.%. (2) Lumber 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) 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 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 a 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 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 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 a

	small diameter. (5) The content of lumber from thinning and pulp with lumber from thinning is to be as high as possible. (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) If plastic is used for product packaging or stowage, recycled plastic shall be used as much as possible, or plant based plastics whose reduction effect of environmental load has been confirmed shall be used as much as possible. [Notes] 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	**Evaluation Criteria** ●Meet the Evaluation Criteria common to all stationery and ink cartridges are replaceable.
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 makes up no less than 70% by weight of the total plastic used(excluding consumable parts). If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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 makes up no less than 70% by weight of the total plastic used (excluding consumable parts). If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies the Evaluation Criteria common to all stationery. **Factors for Consideration** Ink/fluid is refillable
Stamp case	**Factors for Consideration**

with inkpad	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 makes up no less than 70% by weight of the total plastic used (except the mechanical parts). In other cases, the item satisfies 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 makes up no less than 70% by weight of the total plastic used (excluding replaceable parts). If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies the Evaluation Criteria common to all stationery.
Correction tape	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used (excluding replaceable parts). If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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 is 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 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 a small diameter. **Factors for Consideration** Use of soluble and dispersible adhesive in water or in the weak alkaline water solution, and no resin laminate processing.
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 are 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 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 a small diameter.
Book binding tapes	*Evaluation Criteria apply to the rolls only.*
Bookstands	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used (excluding replaceable parts). If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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 makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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** ●Fulfill at least one of below. (1) If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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 plant based plastics whose reduction effect of environmental load has been confirmed.
Mouse pads	
Office machine filters (with frame)	**Evaluation Criteria** ●Fulfill at least one of below. (1) Meets the Evaluation Criteria common to all stationery, or uses plant based plastics whose reduction 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** ●Fulfill at least one of below. (1) Recycled plastic makes up at least 30% of plastic weight. (2) OHP film for inkjet printers fulfill either the above criteria or use plant based plastics whose reduction effect of environmental load has been confirmed.
Paint brushes	**Evaluation Criteria** ●If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies 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** Consumable parts can be replaced
Glue (tape)	
Files	**Evaluation Criteria** ●If the primary material excluding metal is paper, it contains 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 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 a small diameter. Otherwise, the item fulfills at least one of below: (1) Meets the Evaluation Criteria common to all stationery. (2) Clear holders fulfill either the above criteria or use plant based plastics whose reduction effect of environmental load has been confirmed. **Factors for Consideration** Structure allows separation of cover and closing mechanism to enable reuse and recycling of components, as well as their separate disposal.
Binders	**Evaluation Criteria** ●If the primary material excluding metal is paper, it contains 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 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 a small diameter. Otherwise, the item meets the Evaluation Criteria common to all stationery. **Factors for Consideration** Structure allows separation of cover and closing mechanism to enable reuse and recycling of components, as well as their separate disposal.
Filing supplies	
Photo albums (including refills)	
Binding string	**Evaluation Criteria** ●Fulfill at least one of below. (1) If the primary material is paper, recycled pulp makes up no less than 70% of it. 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 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 a small diameter. (2) If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies the Evaluation Criteria common to all stationery. (3) Otherwise, the item meets the Evaluation Criteria common to all stationery.
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 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 a 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 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 a 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 contains no less than 40% recycled plastic, or use plant based plastics whose reduction effect of environmental load has been confirmed.
Graph paper Drafting paper Notebooks	**Evaluation Criteria** ●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 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 a small diameter. ●Coated paper: both sides totaling no more than 30 g/m2 or meet the Evaluation Criteria for "Coated printing paper". ●Non-coated paper: no more than approximately 70% bleaching.
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 Self-stick removable notes	**Evaluation Criteria** ●If the primary material is paper, recycled pulp makes up no less than 70% (excluding the adhesive portion) of it. 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 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 a small diameter. Otherwise, the item meets the Evaluation Criteria common to all stationery. **Factors for Consideration** 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 makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies the Evaluation Criteria common to all stationery.
Recycling	**Evaluation Criteria**

boxes	●If the primary material is plastic, recycled plastic makes up no less than 70% by weight of the total plastic used. If recycled plastic consists solely of post-consumer material, the blending ratio shall be no less than 35 wt.%. In other cases, the item satisfies the Evaluation Criteria common to all stationery.
Can and bottle crushers (manual)	
Name plates (desktop)	
Name tags (pin or string)	
Key hooks	
Chalks	**Evaluation Criteria** ●Recycled material makes up no less than 10%.
Line marking powder	**Evaluation Criteria** ●Recycled material makes up no less than 70%.
Packing straps	**Evaluation Criteria** ●If the primary material is paper, recycled paper makes up 100% of the entire item. ●If the primary material is plastic, recycled plastic that utilizes post-consumer material makes up no less than 25%. Recycled products from pet bottles are excluded.

Notes:

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 reduction effect of environmental load has been confirmed*** denotes material whose reduction 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 denominator and numerator for calculating the compounding ratio of recycled material of the product.
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 denominator and numerator for calculating the compounding ratio of recycled material of the product.
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 ($HFO\text{-}1234_{ze}$).
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. Evaluation criteria of coated printing paper referred to***"2. Paper Coated printing paper"*** in this basic policy.
16. 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 addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.
    Regarding raw timber where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, a supplier who owns raw materials or products etc. as of April 1, 2006, specifies the raw materials or products etc., and reports them in advance to the Forestry Agency once a year, and is a specified raw material or product etc. If it is stated in the certificate, the proof that it is a legal wood prescribed in the above guidelines is unnecessary.
    The period of time for which this exceptional clause is applicable will be determined in consideration with market trend.

(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, b and c; products that include paper as a non-primary material should fulfill (4) b. (1) Products included in Table 1 fulfill both a. b. and c. listed below. Other products 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 is 90% or higher. c. Takes into account environmentally conscious design noted in Table 2 for each evaluation criteria. (2) Fulfill one of the following. a. Recycled plastic makes up at least 10% by weight. b. Plant based plastics whose reduction effect of environmental load has been confirmed makes up at least 25% by weight of total plastic used and bio-based synthetic polymer rate accounts for no less than 10%. (3) Fulfill the following d, and a, b or c according to raw materials used: a. Lumber from thinning, recycled wood pieces obtained from plywood or lumber factories b. Lumber from thinning is in compliance with the regulations concerning forestry in its country or geographical area of origin. c. In the cases other than above a. used as the raw material is in compliance with the regulations concerning forestry in its country or geographical area of origin. d. Discharge rate of formaldehyde from materials is no greater than 0.02 mg/m²h, or the equivalent. (4) 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. c. Above b. does not apply recycled wood pieces obtained from plywood or lumber factories, material left over from forestry and lumber with a 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 Act on the Promotion of Effective Utilization 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 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 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.

Notes:

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 × 100

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

   (1) Parts used to prevent overturning due to theft, earthquakes or as a part of the operating process (including locks, overturning prevention parts, drawer guide-rails, etc.).

(2) Parts that maintain sections that project from the main product (hinges, drawer guide-rails, etc.).
(3) Accessory bolts used to secure or connect a part that meet the Japan Industrial Standards (hereinafter referred to as JIS) 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. ***Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the plant based material rate of weight, which is included in plant based plastics that account for weight of all plastic.
8. 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 its criteria.
   a. Wood material with a corresponding JIS or Japan Agricultural Standards, whose criteria for formaldehyde discharge is regulated, meets the criteria for F☆☆☆.
   b. Wood material that do not qualify for the standards outlined in item (a.) above satisfies the below numbers when evaluated according to the method determined by JIS A1460.

Average	Maximum
0.5 mg/L	0.7 mg/L

9. Evaluation criteria 3b applies to items subject to Clean Wood Act.
10. As for evaluation criteria 4c, in cases other than items subject to the Clean Wood Act, does not apply to virgin pulp manufactured with lumber from thinning, virgin pulp manufactured by using recycled wood pieces such as obtained from plywood or lumber factories, material left over from forestry or lumber with a small diameter.
11. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is as follows.
    a. In the case of items subject to Clean Wood Act, Wood-related Entities comply with Clean Wood Act, and conducted in accordance with the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006) ."
    b. In the case of items other than subject to Clean Wood Act, to be conducted in accordance with the above Guideline. In addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.

    Regarding raw timber where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, a supplier who owns raw materials or products etc. as of April 1, 2006, specifies the raw materials or products etc., and reports them in advance to the Forestry Agency once a

year, and is a specified raw material or product etc. If it is stated in the certificate, the proof that it is a legal wood prescribed in the above guidelines is unnecessary.
The period of time for which this exceptional clause is applicable will be determined in consideration with market trend.

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

Notes:

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 Equipment, 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 (hereinafter referred to as copiers, etc.) with consideration for reuse. b. Contents of specified chemical substances do not exceed the standard content rate. (3) At least one of the parts more than 25g is made of recycled plastic parts or reused plastic parts. (4) Systems for the collection of used device, recovery of parts and/or material recycling are put in place. In addition, for parts that cannot be reused or recycled from the collected equipment, after being reduced etc., they are properly processed and not simply landfilled. **<Individual Criteria>** 1. Copiers and Upgradeable digital copiers (including Copiers and Upgradeable digital copiers with consideration for reuse.) 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 1-3. 2. Multifunction devices (excluding inkjet type.) a. Monochrome multifunction devices (excluding large format devices) meet standards of the applicable category in Tables 2-1, 3 and 4. b. Color multifunction devices (excluding large format devices) meet standards of the applicable category in Table 2-2, Tables 3 and 4. c. Large format multifunction devices meet standards of the applicable category in Table 5. d. Monochrome multifunction devices and professional monochrome multifunction devices with consideration for reuse (excluding large format devices.) meet standards of the applicable category shown in Table 6-1. e. Color multifunction devices and professional color multifunction devices (excluding large format devices.) meet standards of the applicable category shown in Table 6-2. f. Large format multifunction devices with consideration for reuse,

	meet standards of the applicable category shown in Table 1-3. **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 Act on the Promotion of Effective Utilization 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) Paper-saver features are equipped. (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 collection and reuse/recycling of packaging, etc. is considered.

Notes:

1. ***Multifunction Devices*** denote products that have one or more function of print, scan, or fax in addition to copier function.
2. ***Professional Multifunction Devices*** means devices that satisfy all of the following items (a) to (f), and among the following items related to functions (g) to (m), meet five or more for color devices, four or more for monochrome device.
    a. Supports paper with basis weight greater than or equal to 141g m2
    b. A3 - capable
    c. If product is monochrome, monochrome product speed equal to or greater than 86 imp (for the product speed, see Note 1 in Table 1-1 below)
    d. If product is color, color product speed equal to or greater than 50 ipm
    e. Print resolution of 600 x 600 dots per inch or greater for each color
    f. Weight of the base model greater than 180kg
    g. Paper capacity equal to or greater than 8,000 sheets
    h. Digital front end
    i. Hole punch
    j. Perfect binding or ring binding (or similar, such as tape or wire binding, but not staple saddle stitching
    k. Dynamic random access memory(DRAM)equal to or greater than 1,024MB
    l. Third party color certification
    m. Compatible with coated paper

3.Copiers, etc. with consideration for reuse denotes those machines created through a system for which reuse is accounted for during manufacture, and refers to ***Reproducing machines*** and ***Partial reuse type machine***.

Reproducing machines 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.

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.

4. ***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.
5. ***The standard content rate of specified chemical substances*** denotes the standard rate provided by JIS C 0950 (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.
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. For evaluation criteria <common items> (3) , apply to devices that fall under the Specified Reuse Industry of the Resource Effective Utilization Promotion Act.
8. ***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.
9. ***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.
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. 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.
12. 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.
13. 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.

14. 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 6-1 to 6-6. This is until products that fulfill criteria will be supplied in the market outlines in Tables 1-1, 1-2. The time period will be determined based on the observation of the market trends.
15. Regarding the criteria for power consumption, etc., in evaluation criteria (1) <Individual Criteria> for Multifunction devices, transitional measures shall be provided for one year in the fiscal year of 2020 and during this period, "Basic Policy on Promoting Green Procurement policy on "Multifunction devices" (determined by the Cabinet on February 8, 2019) shall be regarded as satisfying the corresponding evaluation criteria by satisfying the criteria such as the amount of power consumption, etc.

Table 1-1: Standards for Energy Consumption for Monochrome copiers and Upgradeable digital monochrome copiers (including Copiers and Upgradeable digital copiers with consideration for reuse, 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	

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 all Tables except Table7 below.
2. Products for A3-capable (Standard format products with a paper path width equal to or greater than 275 mm.) are a 0.3kWh/wk allowance standards of the applicable category in the Tables. Same applies for Tables 1-2, 6-1, and 6-2 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, 6-1 and 6-2 below.

Table 1-2: Standards for Energy Consumption for Color copiers and Upgradeable digital color copiers (including Copiers and Upgradeable digital copiers with consideration for reuse, 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 1-3 : 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 and Large format upgradeable digital copiers (including Large format copiers and Large format multifunction devices with consideration for reuse.)

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		

Notes:

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, 4, 5 and 7 below.
2. The standard of the power consumption at sleep is calculated, adding the sleep mode power allowances for functional adders listed in Table 7 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."

Table2-1 : Standard energy consumption for Monochrome multifunction devices (excluding large format devices)

Product speed(ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm≤20	≤0.263	Not applied
20<ipm≤24	≤0.018×ipm-0.115	
24<ipm≤40		Integral to the base product and print function is initial setting
40<ipm≤60	≤0.016×ipm-0.033	
60<ipm≤80	≤0.037×ipm-1.314	
80<ipm	≤0.086×ipm-5.283	

Notes:

1. For products that can handle A3 size paper, 0.05kWh is added to the standard for each category. Same applies for Table 2-2.
2. For products set with Wi-Fi at the time of shipment, the standard for each category will be added 0.1 kWh to the standard. Same applies for Table 2-2.
3. The method for measuring the standard power consumption is based on “International Energy Star Program Requirements Product Standards for Imaging Equipment Test Methods for Judging Energy Use of Imaging Equipment” (revised in December 2018). Same applies for Table 2-2.

Table2-2 : Standard energy consumption for Color multifunction devices (excluding Large format devices.)

Product speed(ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm≤19	≤0.254	Not applied
ipm=20		Integral to the base product and print function is initial setting
20<ipm≤40	≤0.024×ipm-0.250	
40<ipm≤60	≤0.011×ipm+0.283	
60<ipm≤80	≤0.055×ipm-2.401	
80<ipm	≤0.118×ipm-7.504	

Table 3 : Standard for recovery time

Product speed (ipm)	Short default		Long default	
	Time to sleep Ts(minute)	Recovery time (second)	Time to sleep(minute)	Recovery time (second)
0<ipm≤5	0<Ts≤5	≤min(0.42×ipm+5,30)	5<Ts	≤min(0.51×ipm+15,60)
5<ipm≤10	0<Ts≤10		10<Ts≤15	
10<ipm≤20	0<Ts≤10		10<Ts≤20	
20<ipm≤30	0<Ts≤10		10<Ts≤30	
30<ipm≤40	0<Ts≤10		10<Ts≤45	
40<ipm	0<Ts≤15		15<Ts≤45	

1. Recovery time(second)＝T_{act1}－T_{act0}

Table4: Standards for Time to sleep for Monochrome multifunction devices or Color multifunction devices

Product speed （ipm）	Time required to switch into sleep	
	Initial setting	User adjustment
ipm≤10	≤15min	≤60min
10<ipm≤20	≤30min	
20<ipm≤30	≤45min	
30<ipm		≤120min

Note:

User adjustment is the maximum sleep transition time that can be adjusted by the user. Same applies for Table 5.

Table5 : Standard for Time required to switch into sleep, Energy consumption of base marking engine at sleep and Energy Consumption at off mode

Product speed （ipm）	Time required to switch into sleep		Energy consumption of base marking engine at sleep		Energy consumption at off mode
	Initial setting	User adjustment	Inkjet	Other marking technology	
ipm≤10	≤15min	≤60min	≤5.4W	≤8.7W	≤0.3W
10<ipm≤20	≤30min				
20<ipm≤30	≤45min				
30<ipm		≤120min			

Notes:

1. Other marking technology refers to a marking technology other than the impact method and the inkjet method.
2. The standard of the sleep mode power consumption is to use the value calculated by adding the sleep mode power consumption allowable value for the additional functions in Table 7 to the sleep mode power consumption of the basic marking engine in this table for the conformity determination. However, among the types of additional

functions in Table 7, the addition of the sleep mode power consumption allowances are not applied to the scanner and the internal disk drive.

3. The method of measuring power consumption is based on “International ENERGY STAR PROGRAM Requirements Product Standards for Imaging Equipment Test Methods for Judging Energy Use of Imaging Equipment” (revised in December 2018).

Table 6-1 : Standards for energy consumption for Monochrome multifunction devices and Color multifunction devices for professional use for copiers with consideration for reuse (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 Product
50 < ipm ≤80	≤0.25×ipm-8.15	
80 < ipm	≤0.6×ipm-36.15	

Table 6-2: Standards for energy consumption for Color multifunction devices for professional use for copiers with consideration for reuse (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 7: 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 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	0.8

			handle. Does not address the power requirements of the cordless handset itself.	
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

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

(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 Tables 1-1, 2, and 3-1. Monochrome multifunction printers meet the standards of applicable category in Tables 1-2, 2 and 3-2. b. Color printers (including high performance inkjet and excluding inkjet and impact printers) meet the standards of applicable category in Tables 2, 3-1 and 4-1. Color multifunction color printers meet the standards of applicable category in Tables 2, 3-2 and 4-2. c. Inkjet and Impact printers meet the standards of applicable category in Table 5-1. Inkjet multifunction printers meet the standards of applicable category in Table 5-2. d. Monochrome printers for professional use meet the standards applicable category in Table 6-1. Multifunction monochrome printers for professional use meet the standards applicable category in Table 6-2. e. Color printers for professional use meet the standards applicable category in Table 6-3. Multifunction color printers for professional use meet the standards applicable category in Table 6-4. (2) Large format printers meet the standards of applicable category in Table 7-1, large format multifunction printers meet the standards of applicable category in Table 7-2. (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. (5) At least one of the parts made of recycled plastic parts or reused plastic parts are used. **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.

	(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.

Notes:

1. ***Multifunction Printers*** mean products that have one or more function of copier, scan, or fax in addition to print function.
2. ***Printers for professional use and Multifunction Printers for professional use*** means devices that satisfy all of the following items (a) to (f), and among the following items related to functions (g) to (m), meet five or more for color devices, four or more for monochrome device.
    a. Supports paper with basis weight greater than or equal to 141g m2.
    b. A3 - capable
    c. If product is monochrome, monochrome product speed equal to or greater than 86 imp (for the product speed, see Note 1 in Table 1-1 below)
    d. If product is color, color product speed equal to or greater than 50 ipm
    e. Print resolution of 600 x 600 dots per inch or greater for each color
    f. Weight of the base model greater than 180kg
    g. Paper capacity equal to or greater than 8,000 sheets
    h. Digital front end
    i. Hole punch
    j. Perfect binding or ring binding (or similar, such as tape or wire binding, but not staple saddle stitching
    k. Dynamic random access memory(DRAM)equal to or greater than 1,024MB
    l. Third party color certification
    m. For coated paper
3. ***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.
4. ***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.
5. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950 (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.
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. When the printer to be procured includes consumables comprised of a single toner container, or a single ink container and fulfills the Evaluation Criteria (5) “The chemical safety of toner is confirmed” or “The chemical safety of ink is confirmed” in ***5-6***

Cartridges, etc., Toner Cartridge of the Basic Policy, it shall be treated as designated procurement goods, etc.

8. 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.
9. Evaluation criteria (5) does not apply to impact printers and multifunction printers.
10. Regarding the criteria of energy consumption of (1) and (2), the transition period shall be applied for one year in the fiscal year of 2020, and during this period, the "Basic Policy on Promoting Green Procurement" (Cabinet decision on February 8, 2019), which satisfies such as power consumption of the Evaluation criteria (1) and (2) for printers and multifunction printers.

Table1-1 : Standard energy consumption for Monochrome printers (excluding Inkjet printers, Impact printers and Large format printers.)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm≤20	≤0.226	Not applied
20<ipm≤24	≤0.018×ipm-0.152	
24<ipm≤40		Integral to the base product and print function is initial setting
40<ipm≤60	≤0.025×ipm-0.439	
60<ipm≤135	≤0.049×ipm-1.903	
135<ipm	≤0.183×ipm-20.127	

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 all Tables except Table 8 below.
2. Products for A3-capable are 0.3 kWh/wk allowance standards of the applicable category in the Tables. Same applies for Tables 1-2, 4-1, and 4-2 below.
3. For products set with Wi-Fi at the time of shipment, the standard for each category will be added 0.1 kWh to the standard. Same applies for Tables 1-2,4-1, and 4-2 below
4. The measuring method for the standard power consumption is based on “International ENERGY STAR PROGRAM Requirements Product Standards for Imaging Equipment Requirements for Imaging Equipment Test Methods for Judging Energy Use of Imaging Equipment” (revised in December 2018). Same applies for Tables 1-2, 4-1, 4-2and Tables 6-1 to 6-4.

Table 1-2: Standard energy consumption for Monochrome Multifunction printers (excluding Inkjet printers, Impact printers and Large format printers.)

Product speed (ipm)	Standards(kWh)	Factor of automatic duplex printing function
ipm≤20	≤0.263	Not applied
20<ipm≤24	≤0.018×ipm-0.115	
24<ipm≤40		Integral to the base product and print function is initial setting
40<ipm≤60	≤0.016×ipm-0.033	
60<ipm≤80	≤0.037×ipm-1.314	
80<ipm	≤0.086×ipm-5.283	

Table 2: Standard for Recovery time

Product speed (ipm)	Short default		Long default	
	Time to sleep Ts(minute)	Recovery time (second)	Time to sleep(minute)	Recovery time (second)
0<ipm≤5	0<Ts≤5	≤min(0.42×ipm+5,30)	5<Ts	≤min(0.51×ipm+15,60)
5<ipm≤10	0<Ts≤10		10<Ts≤15	
10<ipm≤20	0<Ts≤10		10<Ts≤20	
20<ipm≤30	0<Ts≤10		10<Ts≤30	
30<ipm≤40	0<Ts≤10		10<Ts≤45	
40<ipm	0<Ts≤15		15<Ts≤45	

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 as Tables 3-1, 3-2, 5-1, 5-2, 7-1, 7-2 and 8 below.Recovery time : the time it takes for a device to return from a sleep or off mode to a ready state. The calculation method is as follows.Recovery time(second)＝T_{act1}-T_{act0}

   T_{act1}: Time (seconds) from sleep mode until the first sheet is ejected from the device

   T_{act0}: Time (seconds) from the ready state until the first sheet is ejected from the device

3. In this table, min (A, B) is the minimum function and represents the smaller value of A and B. For example, the reference min (0.42 × ipm + 5, 30) of the recovery time in the short initial setting is a smaller value of either “0.42 × ipm + 5 seconds or 30 seconds”.
4. There is no provision for a recovery time for products that exceed the long default sleep transition time (Ts).

Table3-1: Standards for time to sleep for Monochrome printers or Color printers (including High-performance inkjet printers, excluding Inkjet printers and Impact printers.)

Product speed （ipm）	Time required to switch into sleep	
	Initial setting	User adjustment

ipm≤10	≤15min	≤60min
10<ipm≤20	≤30min	
20<ipm≤30	≤45min	
30<ipm		≤120min

Note:

User adjustment is the maximum sleep transition time that can be adjusted by the user. Same applies for Tables 3-2, 5-1, 7-1 and 7-2.

Table3-2: Standard for Time required to switch into sleep for Monochrome multifunction printers or Color multifunction printers (including High-performance inkjet printers, excluding Inkjet printers and Impact printers.)

Product speed（ipm）	Time required to switch into sleep	
	Initial setting	User adjustment
ipm≤10	≤15min	≤60min
10<ipm≤20	≤30min	
20<ipm≤30	≤45min	
30<ipm		≤120min

Table4-1: Standard Energy Consumption for Color printers (excluding Inkjet printers and Impact printers.)

Product speed (ipm)	Standards (kWh)	Factor of automatic duplex printing function
ipm≤19	≤0.254	Not applied
ipm＝20		Integral to the base product and print function is initial setting
20<ipm≤40	≤0.024×ipm-0.250	
40<ipm≤60	≤0.011×ipm+0.283	
60<ipm≤80	≤0.055×ipm-2.401	
80<ipm	≤0.118×ipm-7.504	

Table5-1 : Standard for Time required to switch into sleep, Energy consumption of base marking engine at sleep and Energy consumption at off mode for Inkjet printers and Impact printers (excluding Large format printers.)

Product speed (ipm)	Time required to switch into sleep		Energy consumption of base marking engine at sleep	Energy consumption at off mode
	Initial setting	User adjustment		
ipm≤10	≤5 min	≤60 min	≤0.6W	≤0.3W

10<ipm≤0	≤15 min			
20<ipm≤30	≤30 min			
30<ipm	≤45 min	≤120 min		

Notes

1. The standard of the sleep mode power consumption is to use the value calculated by adding the sleep mode power consumption allowable value for the additional functions in Table 7 to the sleep mode power consumption of the basic marking engine in this table for the conformity determination.
2. The method of measuring power consumption is based on “International ENERGY STAR Program Requirements Product Standards for Imaging Equipment Test Methods for Judging Energy Use of Imaging Equipment” (revised in December 2018).

Table5-2 : Standard for Time required to switch into sleep, Energy consumption of base marking engine at sleep and Energy consumption at off mode for Multifunction printers and Multifunction impact printers (excluding Large format printers.)

Product Speed(ipm)	Time required to switch into sleep		Energy consumption of base marking engine at sleep	Energy consumption at off mode
ipm≤10	≤15min	≤60min	≤1.1W	≤0.3W
10<ipm≤20	≤30min			
20<ipm≤30	≤45min			
30<ipm		≤120min		

Table6-1 : Standard Energy Power Consumption for Professional Monochrome Printers

Product Speed(ipm)	Standard(kWh)	Factor of automatic duplex printing function
85<ipm≤90	≤0.2×ipm-6.4	Integral to the base product
90<ipm	≤0.55×ipm-37.9	

Note:

For products that can handle A3 size paper, 0.05kWh is added to the standard for each category. Same applies for Tables 6-2, 6-3 and 6-4.

Table6-2 : Standard Energy Power Consumption for Professional Monochrome Multifunction Printers

Product Speed(ipm)	Standard(kWh)	Factor of automatic duplex printing function
85<ipm	≤0.6×ipm-36.15	Integral to the base product

Table6-3 : Standard Energy Power Consumption for Professional Color Printers

Product Speed(ipm)	Standard(kWh)	Factor of automatic duplex printing function
49<ipm≤75	≤0.2×ipm-2.15	Integral to the base product
75<ipm	≤0.7×ipm-39.65	

Table6-4 : Standard Energy Power Consumption for Professional Color Multifunction Printers

Product Speed(ipm)	Standard(kWh)	Factor of automatic duplex printing function
49<ipm≤70	≤0.2×ipm-2.05	Integral to the base product
70<ipm≤80	≤0.7×ipm-37.05	
80<ipm	≤0.75×ipm-41.05	

Table7-1: Standard for Time required to switch into sleep, Energy consumption of base marking engine at sleep and Energy consumption at off mode for Large format Printers

Product Speed(ipm)	Time required to switch into sleep		Energy consumption of base marking engine at sleep		Energy consumption at off mode
	Initial setting	User adjustment	Inkjet	Other marking technology	
ipm≤10	5min	60min	≤4.9W	≤2.5W	≤0.3W
10<ipm≤20	15min				
20<ipm≤30	30min				
30<ipm	45min	120min			

Note:

Other marking technology refers to a marking technology other than the ink jet method.

Same applies for Table7-2

Table7-2 : Standard for Time required to switch into sleep, Energy consumption of base marking engine at sleep and Energy consumption at off mode for Large format multifunction Printers

Product Speed(ipm)	Time required to switch into sleep		Energy consumption of base marking engine at sleep		Energy consumption at off mode
	Initial setting	User adjustment	Inkjet	Other marking technology	
ipm≤10	≤15min	≤60min	≤5.4W	≤8.7W	≤0.3W

10<ipm≤20	≤30min				
20<ipm≤30	≤45min				
30<ipm		≤120min			

Table 8 : 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 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
Power Supply	N/A	N/A	Applies to both internal and external power supplies of Mailing Machines and Standard	0.02 x (*POUT* – 10.0)

			Format products using Inkjet and Impact marking technologies with nameplate output power (POUT) greater than 10 watts.	
Touch Panel Display	N/A	N/A	Applies to both monochrome and color touch panel displays.	0.2

Notes: 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.

Notes:

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 (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

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" ×11" sheet printed on one side. If the maximum claimed speeds differ when producing images on A4 size or 8.5" × 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

Notes:

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 ≤ 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 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	0.5/GB

			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.	
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

Notes: 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.

Notes:

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 (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).
4. Regarding the criteria of energy consumption of (1) and (2), the transition period shall be applied for one year in the fiscal year of 2020, and during this period, the "Basic Policy on Promoting Green Procurement" (Cabinet decision on February 8, 2019), which satisfies such as power consumption of the Evaluation criteria (1) for scanners.

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

Product speed (ipm)	Default time to sleep		Energy consumption of base marking engine at sleep mode Energy consumption at standby	Off mode energy consumption
	Default time to sleep	User adjustment		
ipm≤10	≤15 minutes	≤60minutes	≤2.5W	≤0.3W
10<ipm≤20	≤30minutes			
20<ipm≤30	≤45minutes			
30<ipm		≤120minutes		

Notes:

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. ***User adjustment*** is maximum time to sleep that can be adjustable by the user.
3. 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.
4. 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 ≤ 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-freque	Any	Includes: Bluetooth, 802.11	2.0

	ncy (RF)			
	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
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

Notes: 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 body shall not exceed the number obtained by the formula of applicable category in Note 3. (2) The power consumption shall not exceed the number obtained by the formula of applicable category in Note 4. (3) Standby power consumption shall be 0.4W or less. However, this is not applicable on the network latency. (4) If a mercury lamp is used as a light source, 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) Solid state light source should be used for light source lamp as much as possible. (3) The noise is as low as possible. (4) 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. (5) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (6) The use of halogenenate noncombustibles on the casing is as minimized as possible. (7) If plastic components are used for either the body or the parts, the item uses as large amount of recycled plastic as possible, (8) Manuals or accessories provided with the product are eliminated as much as possible. (9) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (10) A system for the collection and reuse/recycling of packaging, etc. is considered.

Notes:

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 (width 1.2 m) 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. ***Solid state light source*** refers to a solid device that supplies energy such as electricity to a solid (substance) such as a light emitting diode (LED) or a semiconductor laser (LD) and emits light peculiar to the substance when excited.
3. The method of calculating the standard of the weight of product body is as follows.
   Standard of the weight of product body (kg) = $0.0012 \times \Phi \times \alpha \times \beta$
   Φ: effective luminous flux (lm)
   α: 1.5 for an super short focus projector, 1.2 for a short focus projector, 1.0 for other ones
   β: 2.0 for a solid state light source, 1.0 for other ones
4. The calculation method of power consumption standards is as follows.
   Power consumption standard (W) = $0.070 \times \Phi \times \alpha \times \beta + 85$
   Φ: effective luminous flux (lm)
   α: 1.2 for an super short focus projector, 1.1 for a short focus projector, 1.0 for other ones
   β: 1.5 for a solid-state light source, 1.0 for other ones
5. ***Standby power consumption*** refers to minimum power consumption at which a product may be connected to a main power source and possibly maintained for an indefinite period of time without connecting to external devices. Standby is a minimum power consumption mode of the product.
6. Evaluation Criteria (3) does not applies for the products having AC interception device and the portable one for mobile use mainly.
7. ***Provide the information*** in Evaluation Criteria (4) a. denotes that specific information for use of mercury and appropriate disposal method of a used lamp is provided to the user, by indicating on package of the lamp or the product main body, enclosed printed material, user's manual and websites.
8. ***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.), is 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.
9. ***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.
10. ***The standard content rate of specified chemical substances*** denotes the standard rate provided by JIS C 0950 (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.

11. ***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.
12. ***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.).
13. 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.
14. The standby power consumption of evaluation criteria (3) shall be applied transitional period up to FY 2020 and shall be considered as designated procurement goods by not more than 0.5 W during this period.

(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 comprise 95% or more by total weight of the collected used item (excluding toner). (4) Parts cannot be reused or recycled from the collected used toner cartridges, after being reduced etc., they are properly processed and not simply landfilled. (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, the product is 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 comprise 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 do reduction of volume etc., and prevention of direct landfill disposal. Parts cannot be reused or recycled from the collected used ink cartridges, after being reduced etc., they are properly processed and not simply landfilled. (5) Chemical safety of ink is confirmed. (6) When the paper used meets the criteria for specified

	procurement, the product is 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.

Notes:

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 as toner cartridges.
    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. Products that are comprised of a single ink container will not be considered as ink-cartridges.
    a. ***New ink cartridges*** refer to ink cartridges manufactured by the manufacturer of the main machine unit, or consigned to an outside source.
    b. ***Recycled ink cartridges*** refer 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 included in toner and ink as prescription constituents.
      (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. However, in cases where the substances of (ii) and (iii) are added as prescription constituents, if it is inevitable to use technically and it is difficult to substitute immediately, information on the basis data etc. on exemption from application is disclosed, and unless it can be easily confirmed, that is not the case.
      (ii) Each substance listed in Appendix Table 1 that are classified into CMR category 1A, 1B or 2 of Table 3.1 in Annex VI of Regulation (EC) No.1272/2008.

Appendix Table 1: Restricted Materials

Hazard Category Class	Hazard Category Code	CLP-regulation (EC) No. 1272/2008
Carcinogenicity	Carc. 1A, 1B	H350: May cause cancer
Carcinogenicity	Carc. 1A, 1B	H350i: May cause cancer if inhaled
Carcinogenicity	Carc. 2	H351: Suspected of causing cancer
Germ cell mutagenicity	Muta. 1A, 1B	H340: May cause genetic damage
Germ cell mutagenicity	Muta. 2	H341:Suspected of causing genetic defects
Reproductive toxicity	Repr. 1A, 1B	H360:May damage fertility or the

		unborn child
Reproductive toxicity	Repr. 2	H361:Suspected of damaging fertility or the unborn child

Substances of (so-called candidate list) according to REACH Article 59. The version of the candidate list at the point of application applies.

(iii)Substances which require labelling of the mixtures with the following H phrases defined in Annex I of Regulation (EC) No. 1272/2008 or those which meet the requirements for homogeneous mixture classification as prescribed Appendix Table2.

Appendix Table 2: Restricted materials

Hazard Category Class	Hazard Category Code	CLP-regulation (EC) No. 1272/2008
Specific target organ toxicity Single exposure	STOT SE 1	H370:Causes damage to organs
Specific target organ toxicity Single exposure	STOT SE 2	H371:May cause damage to organs
Specific target organ toxicity Repeated exposure	STOT RE 1	H372:Causes damage to organsthrough prolonged or repeated exposure
Specific target organ toxicity Repeated exposure	STOT RE 2	H373:May cause damage to organs through prolonged or repeated exposure

(iv) Azo coloring agents (dyes and pigments) that generate carcinogenic aromatic amines listed in Appendix Table 3, Annex XVII of REACH Regulation ((EC) (1907/2006)) .

Appendix Table 3: Amines that must not be generated due to the reduction of azo groups

	Chemical name	CAS No.
1	4-aminobiphenyl	92-67-1
2	Benzedrine	92-87-5
3	4-chloro-o-toluidine	95-69-2
4	2-naphthylamine	91-59-8
5	o-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’-dichlorbenzidine	91-94-1
11	3,3’-dimethoxybenzidine	119-90-4
12	3,3’-dimethylbenzidine	119-93-7
13	4,4’-diamino-3,3’ –dimethyldiphenylmethane	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’-4-Aminophenyl Sulfide Bis	139-65-1

18	o-toluidine	95-53-4
19	2,4-diaminotoluene	95-80-7
20	2,4,5-trimethylaniline	137-17-7
21	o-anisidine	90-04-0
22	4-amino-azo-benzen	60-09-3

b. If any insecticidal or bactericidal substances used in toners or inks, only constituents listed in Annex I of "REGULATION (EU) No 528/2012 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 22 May 2012 concerning the making available on the market and use of biocidal products and classified in product type 6 shall be added as prescribed constituents. However, when using materials not listed, it is permitted if application for approval has been submitted on the basis of the command, but if it is not limited to when the disallowance is determined.
c. Toner and ink has yielded a negative result to the Ames test.
d. SDS (Safety Data Sheet) is provided for toner and ink.

10. When procurement 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.
        i. 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).
        ii. 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.
        i. 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).
        ii. 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 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 not have an energy consumption efficiency lower than the value obtained by multiplying the standard energy consumption efficiency for each category listed in Table 1 by 80/100 and rounding down to one decimal place. (2) Client-type computers shall meet one of the following a, b, c, or d. a. Energy consumption efficiency calculated by the formula for each category shown in Table 2 must be multiplied by 100/70 and should not exceed the figure rounded down to one decimal place. b. For Desktop computers, Integrated desktop computers and Notebook computers, typical energy consumption obtained by calculation formula in Note 5 a. shall not exceed maximum typical energy consumption obtained by calculation formula in Note 5 b. c. For Work station, weighted power consumption obtained by calculation formula in Note 6 a. shall not exceed maximum power consumption obtained by calculation formula in Note 6 b. d. For Thin Client, typical energy consumption obtained by calculation formula in Note 5 a. shall not exceed Maximum typical energy consumption obtained by calculation formula in Note 7. (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. (5) If plastic is used for product the body or the parts, recycled plastic or "plant based plastics whose reduction effect of environmental load has been confirmed" shall be used at least one of the body or parts. **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 in the highest possible content ratio recycled plastics or "plant based plastics whose reduction 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.

Notes:

1. Product that meets one of the following criteria is not to be included in ***Computers*** under consideration in this section.
   (1) Arithmetic processing unit, main storage unit, input-output control unit and power supply unit are all multiplexed.
   (2) The number of input-output signal transmitter channels (only in the case of products whose maximum data transmission speed exceeds 10 gigabits per a second) exceeds 512. Computers that can execute operations using more than 4 central processing units.
   (3) Computers that can execute calculations using more than 4 central processing units.
   (4) Server-type computers that use a central processing unit designed to execute instructions with different numbers of bits, and that are equipped with a central processing unit designed specifically for each computer.
   (5) Server-type computers equipped with a central processing unit designed exclusively for 64-bit computer architecture, among those using a central processing unit designed to execute instructions with different bit numbers thing.
   (6) Server-type computers that uses a central processing unit other than the central processing unit that is designed to execute instructions with different numbers of bits. Equipped with central processing unit not provided.
   (7) Product primarily uses its internal battery and without receiving power from a power source.
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. Product types and modes which applied in Evaluation Criteria (2) b, c, d, and Note 5 to 8 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 is not designed for portability and is 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 with an integrated display.
      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 (not affecting) 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 February, 2019), Appendix Table 2-1."

5. 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 (Desktop computer or integrated desktop computer), Table 3-5 (Notebook computer)(unit:kWh)

TEC_{MEM} : Adder allowance of memory equipped with system specified in Table 3-6 (unit : kWh/Gigabit)

TEC_{GR}: Adder allowance of discrete graphics specified in Table 3-6(unit:kWh)

TEC_{ST}:Adder allowance of memory unit (storage) specified in Table 3-6 if applicable(unit:kWh)

TEC_{DIS}:Adder allowance of enhanced-performance display specified in Table 3-6 if applicable(unit:kWh)

TEC_{SW}:Adder allowance of Switchable Graphics specified in Table 3-6 if applicable(unit:kWh)

TEC_{EEE}: allowance per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet specified in Table 3-6 if applicable (unit: kWh/ Gigabit)

6. 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.

7. 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 31W

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 3-6.

TEC_{EEE}: Energy Efficiency Ethernet incentive for Desktops specified in Table 3-6 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.

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. 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 (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.

10. ***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).

11. ***Simplification of Equipment and Function*** 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.

12. 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.

13. ***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.)

14. ***Plastics whose reduction effect of environmental load has 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.

15. Computer body or parts of Evaluation criteria (5) include AC adapters etc. attached to main equipment. Also, Evaluation criteria (5) is not applied to server-type computers.

16. Each procurement organization pays considerable attention to the following:

    a. Information regarding specified chemical substances confirmed at the time of procurement is maintained and preserved until the product is disposed of in order to appropriately manage chemical substances.
    b. Intended use and business content are carefully reviewed at the time of procurement so that only those equipment 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.

17. Energy Consumption Efficiency Evaluation Criteria (1) and (2) a. shall be examined appropriately taking into account the market trends of products that meet the criteria.

Table 1：Standard energy consumption for Server type computers

Category		Standard energy consumption
Type of CPU	Number of CPU sockets	
x86	1	8.9
	2	11.9
	4	8.9
SPARC	1	6.3
	2	4.2
	4	3.5
Power	1	4.6
	2	4.9
	4	4.2

Notes:

1. ***x86*** is a central processing unit designed to be able to execute an instruction having a different number of bits, other than a central processing unit specifically designed for each computer, and is a 32-bit processor. 64-bit compatible with the architecture.
2. ***SPARC*** is a central processing unit other than the central processing unit designed to be able to execute instructions with different numbers of bits, with a function to execute decimal floating-point arithmetic and a register control function. The register control function has a mechanism for saving and restoring the contents of a register in the central processing unit, so that the contents of a register used in the main program can be saved and restored in a subroutine program without saving and restoring the contents in a memory. Refers to the function that can be used.
3. ***Power*** means that among the central processing units other than the central processing unit designed to execute instructions with different number of bits, it has a function to execute decimal floating point arithmetic, but it does not have register control function.
4. The method of calculating energy consumption efficiency according to "3. Energy Consumption Efficiency" in "Criteria for Judgment of Manufacturers of Energy Consumption Equipment, etc. for Improving Energy Consumption Performance of Computers" (Notification 69 of Ministry of Economy, Trade and Industry in 2019) Measurement method (1)".

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

Category						Standard Energy Consumption Efficiency
Type of product		Pscore	Screen size	case capacity	Category name	
Notebook Computer		Less than 8	Less than15	-	A	$E=5.21+TEC_{MEM}+TEC_{DIS}+TEC_{ST}+TEC_{GR}$
			15or more	-	B	$E=7.75+TEC_{MEM}+TEC_{DIS}+TEC_{ST}+TEC_{GR}$
		8or more	-	-	C	$E=11.34+TEC_{MEM}+TEC_{DIS}+TEC_{ST}+TEC_{GR}$
Desktop personal computer	Integrated type	Less than 8	-	-	D	$E=39.87+TEC_{MEM}+TEC_{DIS}+TEC_{ST}+TEC_{GR}$
		8or more	-	-	E	$E=53.32+TEC_{MEM}+TEC_{DIS}+TEC_{ST}+TEC_{GR}$
	Separable type	-	-	Less than5L	F	$E=29.59+TEC_{MEM}+TEC_{ST}+TEC_{GR}$
		-	-	5Lor more Less than 20L	G	$E=31.33+TEC_{MEM}+TEC_{ST}+TEC_{GR}+TEC_{PW}$
		-	-	20Lor more Less than 35L	H	$E=28.45+TEC_{MEM}+TEC_{ST}+TEC_{GR}+TEC_{PW}$
		-	-	35Lor more	I	$E=40.47+TEC_{MEM}+TEC_{ST}+TEC_{GR}+TEC_{PW}$

Notes:

1.***Integrated desktop personal computer*** refers to a desktop computer in which a computer main body and a display receive AC power via one AC power cable and function as a single device.

2.***Separable desktop personal computer*** refers to a desktop computer comprising a computer body without a display and an external display.

3.***P score*** is a numerical value obtained by multiplying the number of cores of the central processing unit by the clock frequency (unit: gigahertz) of the central processing unit.

4.***Screen size*** is a value obtained by dividing the numerical value of the diagonal outer diameter of the display screen in centimeters by 2.54 and rounding to the second decimal place.

5.***Case capacity*** is a numerical value, expressed in liters, of the capacity of a case for housing components constituting hardware in an electronic computer.

6 E represents the following numerical value.

E：Standard energy consumption efficiency Unit:kWh/year）

7.The value of TEC_{MEM} shall be caluculated by the following formula.

$TEC_{MEM} = M_{MAX} \times \alpha_M$

M_{MAX}：Maximum storage capacity excluding cache memory (gigabytes).

The numerical value of αM shall be the numerical value listed in the right column of the following table according to the category listed in the left column of the following table.

Category	α_M
Category A, B and C	0.186
Category D, E, G H and I	0.248

8. TEC_{DIS} shall be calculated according to the categories listed in the left column of the following table, using the calculation formulas listed in the right column of the table

Category	Screen size	TEC_{DIS}
Category A, B and C	-	TEC_{DIS}
Category D and E	Less than17.4	$TEC_{DIS}=(8.76\times0.30)\times((S\div2.54^2)\times 0.0300+r\times0.244)$
	17.4or more	$TEC_{DIS}=(8.76\times0.35)\times((S\div2.54^2)\times 0.0300+r\times0.244)$

S: Numerical value obtained by multiplying the vertical dimension of the display screen by the horizontal dimension and rounding off two decimal places (unit: square centimeter)

r: Total number of pixels displayed on the screen (unit: megapixel)

9. TEC_{ST} shall be the numerical value shown in the right column of the following table according to the Category shown in the left column of the following table, and shall be 0 if neither 2.5 type magnetic disk device nor 3.5 type magnetic disk device is provided.

Category	Type of magnetic disk unit	TEC_{ST}
Category A, B and C	-	2.510
Category D, E, F, G, H and I	Having a 2.5-inch magnetic disk drive	3.140
	Having a 3.5-inch magnetic disk drive	20.380

10. TEC_{GR} shall be calculated according to the category shown in the left column of the following table by the calculation formula shown in the right column of the table, and shall be set to 0 when there is no independent GPU.

Category	TEC_{GR}
Category A, B and C	$TEC_{GR}=4.198$
Category D, E, F,G, H and I	$TEC_{GR}=0.587\times.5+30.463$

FB: Memory area for temporarily storing image data to be displayed on the screen (unit: gigabit / second)

However, if the TEC_{GR} is 130 or more as a result of the above calculation formula, the value of 130 shall be used.

11.The value of TEC_{PW} shall be calculated by the following formula.

$TEC_{PW} = P_{AC} \times 0.0543$

P_{AC}: Rated input of internal power supply (unit: W)

12. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of computers. (Ministry of Economy, Trade and Industry Notification No.69 of 2019)

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

Mode	Conventional	Proxy Base Capability / Full Capability
T_{OFF}	45%	20%
T_{SL}	5%	45%
T_{LI}	15%	5%
T_{SI}	35%	30%

Notes:

Products that use the proxy-compatible / all-compatible mode ratio satisfy either Condition 1 or Condition 2 below. Same applies for Table 3-2.

[Condition 1]

Complete non-patented complete network connectivity (proxy compatible / all compatible) standards.

Full network connectivity capabilities that you actually use are enabled by default at the factory.

[Condition 2]

Enable sleep mode or alternative low power modes that maintain network connection with less than 2W power.

Table 3-2: Mode Weightings for Notebook Computers

Mode	Conventional	Proxy Capability, Full Capability
T_{OFF}	25%	25%
T_{SL}	35%	45%
T_{LI}	10%	5%
T_{SI}	30%	25%

Table3-3 : Internal 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	0.86	0.92	0.92	0.89	-	0.015
		0.90	0.90	0.94	0.90	-	0.03
	Integrated Desktop	0.86	0.90	0.92	0.89	-	0.015
		0.90	0.92	0.94	0.90	-	0.04

Table 3-4 : Base TEC (TEC_{BASE}) Allowances for Desktop Computers or Integrated Desktop Computers

Category Name	Graphics Capability	Desktop or Integrated Desktop	
		Performance	Base Allowance
0	Any Graphics	P≤3	69.0
I1	Integrated or Switchable Graphics	3<P≤6	112.0
I2		6<P≤7	120.0
I3		P>7	135.0
D1	Discrete Graphics	3<P≤9	115.0
D2		P>9	135.0

Notes:

Calculation formula of P is as follows. Same applies for Table3-5.

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

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

Table 3-5 : Base TEC (TEC_{BASE}) Allowances for Notebook Computers

Category Name	Notebook	
	Performance	Base TEC Allowances
0	P≤2	6.5
1	2<P<8	8.0
2	P≧8	14.0

Table3-6: TEC_{GR} Functional Adder Allowances for Desktop, Integrated Desktop, Notebook Computers and Thin Client

<table>
<tr><td colspan="3">Adder Allowances Category</td><td>Desktop</td><td>Integrated Desktop</td><td>Notebook</td></tr>
<tr><td colspan="3">TEC_{MEM}(kWh)</td><td colspan="2">0.8</td><td>2.4×(0.294GB)</td></tr>
<tr><td rowspan="8">TEC_{GR} (kWh)</td><td>G1</td><td>FB_BW≤16</td><td colspan="2">36</td><td rowspan="8">29.3×tanh(0.0038×FB_BW-0.137)+13.4</td></tr>
<tr><td>G2</td><td>16<FB_BW≤32</td><td colspan="2">51</td></tr>
<tr><td>G3</td><td>32<FB_BW≤64</td><td colspan="2">64</td></tr>
<tr><td>G4</td><td>64<FB_BW≤96</td><td colspan="2">83</td></tr>
<tr><td>G5</td><td>96<FB_BW≤128</td><td colspan="2">105</td></tr>
<tr><td>G6</td><td>FB_BW>128 Frame Buffer Data Width <192bit</td><td colspan="2">115</td></tr>
<tr><td>G7</td><td>FB_BW>128 Frame Buffer Data Width ≥192bit</td><td colspan="2">130</td></tr>
<tr><td colspan="3">TEC_{SW}(kWh)</td><td colspan="2">0.5×G1</td><td>N/A</td></tr>
<tr><td colspan="3">TEC_{EEE}(kWh)</td><td colspan="2">8.76×0.2×(0.15+0.35)</td><td>N/A</td></tr>
<tr><td colspan="3">TEC_{ST}(kWh)</td><td colspan="2">26</td><td>2.6</td></tr>
<tr><td colspan="3">TEC_{DIS}(kWh)</td><td>N/A</td><td>8.76×0.35×(1+EP)×(4×r+0.05×A)</td><td>8.76×0.30×(1+EP)×(2×r+0.02×A)</td></tr>
</table>

Notes:

1. TEC_{MEM} Adder: GB applies per GB installed in the system.
2. TEC_{GR} Adder: Applies to only the first dGfx installed in the system, but not switchable Graphics.
3. FB_BW: Is the display frame buffer bandwidth in gigabytes per second (GB/s), calculated as follows:

   BF_BW=Data Rate [Mhz] × Frame Buffer Data Width [bits] / (8 × 1000)
4. TEC_{SW} Applies to automated switching that is enabled by default in Desktops and Integrated Desktops. 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.
5. TEC_{EEE}: Applies per IEEE 802.3az-compliant (Energy Efficient Ethernet) Gigabit Ethernet port enabled as shipped.
6. TEC_{ST} applies once if system has more than one Additional Internal Storage element.
7. EP on 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) Contents of specified chemical substances do not exceed the standard content rate. (2) 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. (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) Packaging and stowage is to be as simple as possible and take into account ease of recycling and reduced environmental impact upon disposal. (6) If plastic is used for product packaging or stowage, recycled plastic or "plant based plastics whose reduction effect of environmental load has been confirmed" shall be used as much as possible.

Notes:

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. ***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 (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
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. ***Plastics whose reduction effect of environmental load has 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.

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 rpm but less than 6,000 rpm		E=exp(2.98×ln(N)-31.2)
		Over 6,000 rpm		E=exp(4.30×ln(N)-43.5)
	Disk size exceeding 50 mm but not over 75 mm; 2 or 3disks	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)

Notes:

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. Single unit Disk refers to a single disk drive. Subsystem refers to a product with multiple disk drives.
5. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods" of "Criteria for Judgments by Manufacturers of Energy Consumption Equipment, etc. for Improving Energy Consumption Performance of Magnetic Disk Drives" (2010 Ministry of Economy, Trade and Industry Notification No. 75).

(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) For computer monitors, the total energy consumption calculated on the calculation formula in Note 3 shall not exceed the maximum total energy consumption calculated on the calculation formula in Note 4 a. (2) For signage displays, following requirements shall be met. (3) On mode power consumption calculated on the calculation formula in Note 5 shall not exceed the maximum on mode power consumption calculated on the calculation formula in Note 6 a. (4) Sleep mode power consumption shall not exceed the sleep mode power consumption standard rate calculated on the calculation formula in Note 7. (5) Off mode power consumption shall be 0.5W or less. (6) Equipped with a function which allows instantaneous full-power operation on resuming working. (7) 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 products, and a system for the proper disposal of components which cannot be reused or recycled shall be in place. (2) The item shall have an improved design for its long life, resource efficiency, and reuse of its parts or recycling of its material, complying with the standards of the Act on the Promotion of Effective Utilization of Resources. (3) The item uses as many recycled components as possible or as much recycled plastic as possible, in case plastic components are applied. (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 collection and reuse/recycling of packaging, etc. is considered.

Notes:

1. ***Displays*** under consideration in the evaluation criteria of this section denotes products with a display screen and associated electronics, often encased in a single housing, that as their primary function produce visual information from a computer, workstation, or server via one or more inputs, external storage, or a network connection (computer monitors and signage displays). Computer monitors are intended for one person to use at a desk. Signage displays are intended for a number of people to use them away from the desk and shall meet two or more criteria listed below from (1) to (4):
    (1) Diagonal screen size is greater than 30 inches
    (2) Maximum reported luminance per square meter is greater than 400 candelas (400cd/m2)
    (3) Pixel density is 5,000 pixels per square inch (5,000 pixels/in2) or less

(4) Shippable without a mounting stand

2. The operation modes to be used in evaluation criteria (2), (3) and Note 3 to 7 are as follows. However, in the case of products without an off mode, evaluation criteria (3) shall not be applied.
   a. On mode: The mode in which the display has been activated, and is providing the primary function.
   b. Sleep mode: A low-power mode in which the display provides one or more non-primary protective functions or continuous functions. During the sleep mode following functions can be activated.
      - Facilitate the activation of on mode via remote switch, touch technology, and internal sensor/timer
      - Providing information or displaying status including time
      - Keep sensor-based functions
      - Maintain a network presence
   c. Off mode: The mode where the display is connected to a power source, produces no visual information, and cannot be switched into any other mode with the remote control unit, an internal signal, or an external signal. The display may only exit this mode by direct user actuation of an integrated power switch or control. Some products may not have an off mode.

3. The total energy consumption related to a computer monitor is calculated by the following formula.

   $E_{TEC} = 8.76 \times (0.35 \times P_{ON} + 0.65 \times P_{SLEEP})$

   E_{TEC}：Total energy consumption (unit : kWh)

   P_{ON}：On mode power consumption (unit : W)

   P_{SLEEP}：Sleep mode power consumption (unit : W)

4. The maximum total energy consumption, the automatic brightness control allowance, and the touch technology allowance for a computer monitor are calculated by the following formula.
   (1) Maximum total energy consumption

   Maximum total energy consumption (kWh)

   $= (E_{TEC\ MAX} + E_{EP} + E_{ABC} + E_N + E_{OS} + E_T) \times eff_{AC_DC}$

   E_{TEC_MAX} is the maximum total energy consumption requirement calculated by Table 1 (unit: kWh)

   E_{EP} is the enhanced performance display allowance calculated by Table 2 (unit: kWh)

   E_{ABC} is the automatic brightness control allowance calculated by (2)below (unit: kWh)

   E_N is the full network connectivity allowance: E_N=2.9 (kWh)

   E_{OS} is the occupancy sensor allowance: E_{OS}=1.7 (kWh)

   E_T is the Touch Technology allowance calculated by following (3) (unit: kWh)

   $eff_{AC\ DC}$ is the standard adjustment for AC-DC power conversion losses that occur at the device powering the display, and equals to 1.0 for AC-powered displays and 0.85 for DC power displays.

   (2) Energy automatic brightness control

For computer monitors with automatic brightness control enabled by default, an energy allowance (E_{ABC}) shall be added to E_{TEC_MAX} if the on mode power reduction (R_{ABC}) is 20% or more.

On mode power reduction (R_{ABC}) and energy automatic brightness control（E_{ABC}）calculation method are calculated by the following formulas.

R_{ABC}＝100×((P300－P12)／P300）

P_{300}: the On Mode power, as measured at an ambient light level of 300 lux (unit: W)

P_{12}: the On Mode power, as measured at an ambient light level of 12 lux (unit: W)

E_{ABC}(kWh)＝0.05×E_{TEC_MAX}

E_{TEC_MAX}：the Maximum total energy consumption(unit: kWh)

(3) Touch technology allowance for monitors

E_T (kWh)=0.15×$E_{TEC\ MAX}$

$E_{TEC_MAX:}$ the maximum total energy consumption (unit: kWh)

5. Maximum on mode power for signage displays is calculated by the following formulas.

P_{ON_MAX}＝(4.0×10-5×ℓ×A)+119×tanh (0.0008×(A－200.0)+0.11)+6

P_{ON_MAX} is the Maximum on Mode Power (unit: W)

A: screen area (unit: square inches)

ℓ : maximum measured luminance (unit: cd/m2)

6. On mode power consumption and P_{ABC} for signage displays

a. On mode power consumption

On mode power consumption =$P_{ON\ MAX}$ +P_{ABC}

P_{ON_MAX} is the maximum on mode power consumption (unit: W)

P_{ABC} is the on mode power allowance for ABC calculated by b. below (unit: W)

b. Energy allowance for automatic brightness control

In the case of a signage display with automatic brightness control by default, the on mode power reduction rate R_{ABC} is calculated by Note 4 b, and when the R_{ABC} is 20% or more, the automatic brightness control allowance P_{ABC} is applied. The automatic brightness control allowance P_{ABC} is calculated by the following formula.

P_{ABC} (W)＝0.05×P_{ON_MAX}

P_{ON_MAX} : the Maximum On Mode Power requirement (unit: W)

7. The sleep mode power consumption standard related to the signage display is calculated by the following formula. The maximum sleep mode power consumption and allowance are shown in the table below.

Sleep mode power consumption＝P_{SLEEP_MAX}+P_N+P_{OS}+P_T

P_{SLEEP} : measured sleep mode power (unit: W)

P_{SLEEP_MAX} : maximum sleep mode power requirement (unit: W)

P_N: full network connectivity allowance (unit: W)

$P_{OS:}$ occupancy sensor allowance (unit: W)

$P_{T:}$ touch technology allowance (unit: W)

Table : Sleep mode power requirement and energy allowance by screen size

Screen size (inches)	P_{SLEEP_MAX} (W)	P_N (W)	P_{OS} (W)	P_T (W)
Screen size ≦30	0.5	3.0	0.3	0.0
Screen size ＞30				1.5

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. Evaluation criteria (5) is to be applied to personal computer monitors. The standard content rate of specified chemical substances denotes the one provided by JIS C 0950 (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 whose content rates are allowed to exceed the standard shall be determined in accordance with Appendix B of the JIS. Handling of other accessories is to be determined in accordance with JIS C 0950.
10. ***Recycled plastic*** denotes part or all of plastic of products that have been discarded after use, remnants discarded during the manufacturing process, or the defective articles (this excludes, however, plastic that has been recycled in the process of manufacturing the product).
11. In order to manage chemical substances adequately, each procurement organization is to manage and maintain content information of specific chemical substances until the product is discarded.
12. As the measuring method for standard energy consumption applies the “Appendix Table 2-2 (Effective in October, 2016) of the International ENERGY STAR Program Operating Specification (enforced in July, 2014).

Table 1: Standard of maximum total energy consumption at on mode for displays

Viewable screen area(in^2)	$E_{TEC\ MAX}$(kWh)
A＜130	（6.13×r）+（0.06×A）+9
130≦A＜150	（6.13×r）+（0.69×A）-72.38
150≦A＜180	（6.13×r）+（0.21×A）-0.50
180≦A＜200	（6.13×r）+（0.05×A）+28
200≦A＜230	（6.13×r）+（0.03×A）+31.33
230≦A＜280	（6.13×r）+（0.2×A）-7
280≦A＜300	（6.13×r）+49
300≦A＜500	（6.13×r）+（0.2×A）-11
A≧500	（6.13×r）+89

Note:

r represents screen resolution in megapixel(MP), and **A** represents viewable screen area(in^2).

Table2: Calculation of energy Allowance for Enhanced Performance Displays for computer monitor

Color gamut criteria	Allowance (kWh)
Color gamut support is 32.9% of CIE LUV or greater	0.15g(E_{TEC_MAX}-6.13r)
Color gamut support is 38.4% of CIE LUV or greater	0.65g(E_{TEC_MAX}-6.13r)

Note:

1. For computer monitors meeting all of the following a. to c., the allowable value of the power consumption of the performance enhanced display calculated according to this table can be used as the maximum total energy consumption.
    a. Contrast ratio of at least 60:1 shall be measured at a horizontal viewing angle of at least 85° from the perpendicular on a flat screen and at least 83° from the perpendicular on a curved screen, with or without a screen cover glass;
    b. A native resolution shall be 2.3 megapixels (MP) or more;
    c. Color gamut shall be 32.9% of CIE LUV or more.
2. E_{TEC_MAX} represents the maximum total energy consumption requirement, and r represents the screen resolution (in MP).

(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** Meet one of the criteria below (Evaluation Criteria applies to the case). (1) Recycled plastic makes up at least 40% of the weight of the plastic part. (2) Slim-type case that is 5 mm or less in thickness or assembled type case (spindle-type case etc.). (3) Uses plant based plastics whose reduction effect of environmental load has been confirmed. (4) In case of paper products, recycled pulp content is 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 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 a 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. This does not apply to virgin pulp manufactured with lumber from thinning, or virgin pulp manufactured by using recycled wood pieces such as obtained from plywood or lumber factories, material left over from forestry, or lumber with a 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.

Notes:

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 reduction effect of environmental load has been confirmed*** denotes material whose reduction 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 addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.

(2) Target Setting Guideline

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

7. Office Equipment, 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.

Notes:

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 (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, the product is capable of using the specified procurement material. **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 ink cartridges is considered. (3) 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. (4) The item is designed so that it can be easily dismantled and its materials separated to facilitate refurbishment, reuse and recycling. (5) 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. (6) 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) are 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. (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 the collection and reuse/recycling of packaging, etc. is considered.

Notes:

1. ***Digital duplicators*** are full-auto duplicator system through the method of stencil duplicating with digital reproduction function.
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 (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

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)

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

Notes:

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
   (1) Number of copies per a plate: 200 copies/plate

(2) Number of plates per hour: 2 plates
(3) Number of copies per hour: 400 copies / hour
(4) Printing speed: The default speed for start-up set at the time of shipment
(5) Test chart: A4, area covered by image 4-7 %
(6) Standard printing paper: Good quality paper at 64g/m²
(7) Environmental criteria during measurement:
Temperature: 21±3 degrees C
Humidity: 65±10%
Leave the machine inactive for at least 12 hours before measurement
(8) For measurement while printer function is idle, confirm the auto shut-off mode or the switch to low power mode during the inactivity period.
(9) 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.
(10) 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** 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 is 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.

Notes:

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. (3) Contents of specified chemical substances do not exceed the standard content rate. **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.

Notes:

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.)
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 one provided by JIS C 0950 (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 whose content rates are allowed to exceed the standard shall be determined in accordance with Appendix B of the JIS. Handling of other accessories is to be determined in accordance with JIS C 0950.

(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** Meet one of the criteria below. (1) Disposable batteries exceed the smallest average duration listed in accordance with 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.

Notes:

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 with 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

Common name	Main applications	Discharge test conditions			Smallest Average Duration	
		Load Resistance (Ω)	Discharge time per day	Cut-off voltage	Initial Usage	After 12 Months Storage and Recommended Period of Usage
D (61.5mm : 34.2mm)	Portable light	2.2Ω	Note 1	0.9V	750minuits	675minuits
	Equipment and toys using motors	2.2Ω	1hour	0.8V	16hours	14hours
	Portable stereo	600mA	2hours	0.9V	11hours	9.9hours
C (50.0mm : 26.2mm)	Equipment and toys using motors	3.9Ω	1hour	0.8V	14hours	12hours
	Portable stereo	3.9Ω	Note 1	0.9V	790minuits	710minuits
	Portable stereo	400mA	2hours	0.9V	8hours	7.2hours
AA (50.5mm : 14.5mm)	Digital camera	1,500mW 650mW	Note 2	1.05V	40times	36times
	Portable light (LED)	3.9Ω	Note3	0.9V	230minuits	205minuits

	Equipment and toys using motors	3.9Ω	1hour	0.8V	5hours	4.5hours
	Toys(without motor)	250mA	1hour	0.9V	5hours	4.5hours
	CD player, electronic games	100mA	1hour	0.9V	15hours	13hours
	Radio, clock, Remote controller	50mA	Note 4	1.0V	30hours	27hours
AAA (44.5mm : 10.5mm)	Portable light	5.1Ω	Note 5	0.9V	130minuits	115minuits
	equipment used motor, toys	5.1Ω	1hour	0.8V	120minuits	105minuits
	Digital audio	50mA	Note 5	0.9V	12hours	10hours
	Remote controller	24Ω	Note 6	1.0V	14.5hours	13.0hours

Note 1: The cycle of 4 minutes discharge and 11 minutes discharge pause is continuously repeated for 8 hours.

Note 2: The cycle of 5 minutes discharge (alternate discharge of 1,500 mW for 2 seconds and 650 mW for 28 seconds) and the 55 minutes discharge pause are repeated continuously for 24 hours.

Note 3: The cycle of 4 minutes discharge and 56 minute discharge pause is continuously repeated for 8 hours.

Note 4: The cycle of 1 hour discharge and 7 hours discharge pause is continuously repeated for 24 hours.

Note 5: The cycle of 1 hour discharge and 11 hours discharge pause is continuously repeated for 24 hours.

Note 6: The cycle of 15 seconds discharge and 45 second discharge pause is continuously repeated for 8 hours.

(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 fulfill either following a. or b. a. Simplification of additional equipment 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 for the repair and storage by the manufacturer, communication company, or sales company of renewing expendable parts such as the batteries (maintain supply for six years or more after the termination of product manufacturing), etc. is in place. (6) Contents of specified chemical substances do not exceed the standard content rate. The content rate can be easily confirmed on websites, etc. (7) If plastic is used in the product, information on the content ratio of recycled plastic in the weight of the plastic and the content ratio of “plant based plastic whose reduction effect of environmental load has been confirmed” shall be disclosed. In addition, the information can be easily confirmed on the website, 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 or “plant based plastic whose reduction effect of environmental load has been confirmed” 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.

Notes:

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 without connecting with wireless base station public by mobile station telephone, and is installed in the device portable, used for extension 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 equipment 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. As for Evaluation Criteria (5), with respect to smartphones, "maintain for six years or more after the termination of product manufacturing", shall be "maintain for three years or more after the termination of product manufacturing", until sufficient products are supplied to the market. For this period, consideration will be made while

taking market trend into consideration. For Evaluation Criteria (5) 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 (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.
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. ***Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
13. ***Bio-based synthetic polymer content rate*** based on the bio-based synthetic polymer content is multiplied by the bio-based synthetic polymer content rate (ratio of the weight of the plant-derived material component contained in the plastics based on the plant to the plastic weight).
14. .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 recycling	Reduction of environmental load when recycling	Parts that include rare metals as well as types of ordinary metals such as steel, copper and aluminum are understood.
		Use of complex material and processed material that interferes with recycling is 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) For Electric refrigerators and Electric refrigerator-freezers energy consumption rate does not exceed the result using the formula of each category listed in Table as follows. a. Reference value 1 is the standard energy consumption rate. b. Reference value 2 is the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/86. (2) For Electric freezers 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 100/90. a. Reference value 1 is the standard energy consumption rate. b. Reference value 2 is the standard energy consumption rate calculated using the formula for each category listed in Table multiplied by 100/90. (3) Fluorocarbons are not used as refrigerant or expanding agent for insulation. (4) 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 Act on the Promotion of Effective Utilization 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.

Notes:

1. Electric refrigerators and electric refrigerator-freezers that meet any of the following criteria from a to d will not be considered as ***Electric refrigerators*** or ***Electric refrigerator-freezers*** under consideration in the evaluation criteria of this section.
   (1)Those that were manufactured for professional use.
   (2)Those that use thermo-element.
   (3)Those that use an absorber.
   (4)Those that main purpose is wine storage

Electric freezers that meet any of the above criteria a, b or c are not be considered as ***Electricr-freezers*** under consideration in the evaluation criteria of this section.

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 (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. However Evaluation Criteria (4) 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.

Table: Formula for calculating standard energy consumption efficiency rate for electric refrigerators, electric freezers and electric refrigerator-freezers category

Category			Calculation formula of standard energy consumption efficiency
Type	Cooling type	Rated internal volume	
Refrigerator and refrigerator-freezer	Cold air-natural convection type	—	$E_1=0.73V_1+122$
	Cold air-forced circulation type	Up to 375liter	$E_1=0.199V_1+265$
		Over 375liter	$E_1=0.281V_1+112$
Freezer	Cold air-natural convection type	—	$E_2=0.589V_2+74$
	Cold air-forced circulation type	—	$E_2=1.328V_2+80$

Notes:

1 E_1, V_1 and E_2, V_2 represent the following numerical values.

E_1: standard energy consumption efficiency (unit: kWh/year)

V_1: Adjusted internal volume (numerical value obtained by multiplying the rated internal volume of each storage room by the adjusted internal volume coefficient, calculated by the following formula and rounded off to the nearest whole number) (unit: L)

$$V_1 = \sum(Kci \times Vi)(i=1,\cdots,n)$$

Kc*i*: Adjusted internal volume coefficient (the numbers listed in the right column for each type of storage room listed in the left column of the following table)

V*i*: Rated internal volume

n: Number of storage rooms of electric refrigerator and electric refrigerator-freezer

Type of storage room	Adjusted internal volume coefficient(Kc*i*)
Pantry	0.38
Cellar	0.62
Refrigerated	1
Chiller	1.1
Zero star	1.19
One star	1.48
Two stars	1.76
Three stars or four stars	2.05

E_2: standard energy consumption efficiency (unit : kWh/year)

V_2: Adjusted internal volume (numerical value obtained by multiplying the rated internal volume of each storage room by the adjusted internal volume coefficient, calculated by the following formula and rounded off to the nearest whole number) (unit: L)

$V_2 = \sum(Kci \times Vi)(i=1,\cdots,n)$

Kc*i*: Adjusted internal volume coefficient (the numbers listed in the right column for each type of storage room listed in the left column of the following table)

V*i*: Rated internal volume

n: Number of storage rooms in the electric freezer

Type of storage room	Adjusted internal volume coefficient (Kc*i*)
One star	1.48
Two stars	1.76
Three stars or four stars	2.05

2. Energy consumption efficiency of electric refrigerators and Electric refrigerator-freezers is calculated according to “3 Energy Consumption Efficiency Measurement Methods (3),” based on “Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of electric refrigerators and electric refrigerator-freezers (Ministry of Economy, Trade and Industry notification No.38 of 2016).
3. Energy consumption efficiency of freezers is calculated according to “3 Energy Consumption Efficiency Measurement Methods (3),” based on “Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of freezers (Ministry of Economy, Trade and Industry Notification No.39 of 2016).

4. Energy consumption efficiency is calculated according to “3 Energy Consumption Efficiency Measurement Methods (3),” based on “Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of electric refrigerators and Electric refrigerator-freezers (Ministry of Economy, Trade and Industry Notification No.39 of 2016).

(2) Target Setting Guideline

Ratio of the number of refrigerators, etc. (refrigerators, freezers, and refrigerator-freezers) meeting the criteria of each reference value 1 and reference value 2 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) 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.

Notes:

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) Plasma display type
   (6) Rear projection style products.
   (7) The size of the receiver is 10V or less.
   (8) Wireless products.
   (9) 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 (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.

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 whose size is less than 39V size, one year transition period will be applied in the fiscal year 2020. The products shall be considered as meet evaluation criteria (1) 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 the 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

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	With no added functions	E=2.0×S+58
			With 1 added function	E=2.0×S+70

		speed	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	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	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 speed	With no added functions	E=6.6×S-104
			With 1 added function	E=6.6×S-92
			With 2 added functions	E=6.6×S-80
			With 3 added functions	E=6.6×S-68

Notes:

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: Those that use a liquid crystal panel to display 60 or more but less than 120 still frames per second.
   Liquid crystal double speed: Those that use a liquid crystal panel to display 120 or more but less than 240 still frames per second.
   Liquid crystal quadruple speed: Those that use a liquid crystal panel to display 240 or more still frames per second.
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," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of television receivers (Ministry of Economy, Trade and Industry Notification No.24 of 2010).

(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 formula for each category listed in Table. **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.

Notes:

1. Products that meet the below criteria will not be considered ***Electric toilet seats*** under consideration in the evaluation criteria of this section:
   (1) Electric toilet seats that use warm water supplied from a separate warm water system.
   (2) Electric toilet seats, those are equipped only with warm water washing apparatus.
   (3) Portable electric toilet seats that are used for welfare purposes.
   (4) Electric toilet seats that are primarily used in train cars, etc.
   (5) Electric toilet seats for potties.
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 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)	175
	Instantaneous type (Without a warm-water tank)	97

Notes:

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),” based on “Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of electric toilet seats (Ministry of Economy, Trade and Industry Notification No.288 of 2007).

(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.

Notes:

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 (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.
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

Notes:

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 "3 Energy Consumption Efficiency Measurement Methods," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of microwave ovens. (Ministry of Economy, Trade and Industry Notification No.6 of 2006)

(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 (Ordinance No. 390, 1962) 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-use 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-use air conditioners does not fall below the applicable standard energy consumption efficiency or its calculation formula listed in Table 3. a. Reference value 1 is the standard energy consumption rate. b. Reference value 2 is the standard energy consumption rate calculated using the formula for each category listed in Table 3 multiplied by 88/100. (4) Global warming potentials of the materials used for the refrigerant are 750 or smaller. (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) The material with a small global warming potential to the extent possible are used for the refrigerant. (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 Act on the Promotion of Effective Utilization 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 information above is 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.

Notes:

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:
   (1) Cooling capacity exceeds 28kW (for multi-type air conditioner, cooling capacity exceeds 50.4kW).
   (2) Wind type or Wall type and only for cooling.
   (3) Uses water-cooled engine.
   (4) Does not use compressed motor.
   (5) Uses energy other than electricity as a source of heat.
   (6) The maintenance of machinery function or hygienic regulation of food.
   (7) Primary function of the structure is to convey cooled outdoor air indoors.
   (8) Target air conditioners.
   (9) Air conditioners designed for use in automobiles and other vehicles.
   (10) Duct air control system for highly airtight and highly insulated
   (11) Structure includes regenerator (includes those that are also used for heating) exclusively for the purpose of storing heat for cooling.
   (12) Structure operates compressor, fan, and other major components by electricity generated by own solar cell module.
   (13) One having floor heating function or hot-water supply function.
   (14) 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. Evaluation criteria (4) apply to the products for which target values and target fiscal year are determined by Ministry of Economy, Trade and Industry Notification No. 50 (items to be judged by manufacturers of air conditioners) of the household air conditioners and shops / office air conditioners (refrigeration capacity per day is less than 3 tons) prescribed in Article 3 of the Enforcement Regulation (Ministry of Economy, Trade and Industry Ordinance No. 29 of 2015) concerning rationalization of use of CFCs and management of CFCs Ministry of Economy, Trade and Industry.
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. ***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.
6. 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 (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.
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 (Ordinance No. 390, 1962), 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

Notes:

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 efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods (2)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of air conditioners (Ministry of Economy, Trade and Industry Notification No.213 of 2009). 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-use Air Conditioners**

Category			Standard energy consumption efficiency or its calculation formula
Unit type and function	Indoor unit type	Cooling capacity	
Several combination or other than the below	Cassette type for all sides	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)
		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

Notes:

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)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of air conditioners (Ministry of Economy, Trade and Industry Notification No.213 of 2009).

(2) Target Setting Guideline

Domestic-use air conditioners: ratio of the number of air conditioners meeting the criteria to the total number of domestic-use air conditioners to be purchased (including lease/rental agreements) in the fiscal year.

Industrial-use air conditioners: ratio of the number of air conditioners meeting the criteria of each reference value 1 and reference value 2 to the total number of industrial-use 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) Annual performance factor is no less than 1.07. (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.

Notes:

1. ***Gas heat pump air conditioner*** includes units defined by JIS B 8627 whose rated cooling capacity is between 7.1 and 28kW under consideration in the evaluation of this section.
2. Annual performance factor is calculated using JIS B 8627.
3. ***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.
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 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** 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.

Notes:

1. ***Space heaters*** under consideration in the evaluation criteria of this section use gas or oil, and should not meet any of the criteria below:
   (1)The item employs non-vented types.
   (2)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.
   (3)Vented gas space heaters.
   (4)Vented oil space heaters with maximum fuel consumption rate greater than 4.0L/h.
   (5)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," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption

performance of stoves (Ministry of Economy, Trade and Industry Notification No.55 of 2006). Same applies for Table 2.

Table2: 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

Notes: 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 does 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, annual heating performance is 3.20 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.

Notes:

1. Equipment having a heating function will not be considered as ***Heat pump style electric hot water supply system*** in the evaluation criteria.
2. The annual heating performance for business use heat pump style electric hot water supply system is according to JRA 4060：2018, to be calculated using the below formula:

   Annual heating performance : Annual heating volume/Annual energy consumption

   Annual heating performance : Annual total of the value obtained by multiplying the heating amount per day of each period (summer, intermediate period, winter, frosting period) by the target number of days.

   Annual energy consumption : Annual total of the value of power consumption per day of each period (summer, intermediate period, winter, frosting period) multiplied by the target number of days.

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 are not used.

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.
4. Energy consumption efficiency is calculated according to "3 Energy Consumption Efficiency Measurement Methods," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of electric hot water heaters (Ministry of Economy, Trade and Industry Notification No.38 of 2013).

(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** (1) Energy consumption efficiency is 90 or more for latent heat recovery type gas water equipment. (2) Except for latent heat recovery type gas water equipment, 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.

Notes:

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:
   (1)Storage-style hot water supply system.
   (2)Items that were designed for commercial use.
   (3)Items that use gas (excluding city gas categorized under group 13A and liquefied petroleum gas) as its fuel source.
   (4)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.
   (5)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				83.4

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

Note:
Energy consumption efficiency is calculated according to “3 Energy Consumption Efficiency Measurement Methods,” based on “Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of gas water heaters (Ministry of Economy, Trade and Industry Notification No.58 of 2006).

(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** (1) Energy consumption efficiency is 90 or more for latent heat recovery type old water equipment. (2) Except for latent heat recovery type oil water equipment, 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.

Notes:

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:
   (1) Pot style bath furnace equipped with a burner.
   (2) Items that were designed for commercial use.
   (3) Items equipped with a structure for burning firewood.
   (4) 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

Notes:

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," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of oil water heaters (Ministry of Economy, Trade and Industry Notification No.58 of 2006).

(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.

Notes:

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

Notes:

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)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of gas cooking equipment (Ministry of Economy, Trade and Industry Notification No.56 of 2006).

Table 2 : 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

Notes:

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)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of gas cooking equipment (Ministry of Economy, Trade and Industry Notification No.56 of 2006).

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

Notes:

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)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of gas cooking equipment (Ministry of Economy, Trade and Industry Notification No.56 of 2006).

(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

LED lighting equipment	**Evaluation Criteria** (1) LED lighting equipment excluding floodlight and security light shall satisfy the following requirements. a. Reference value 1: the intrinsic energy consumption efficiency meets the standard of the applicable category in Table 1-1. Or is the intrinsic energy consumption efficiency meets the standard of the applicable category in Table 1-2, having high effect of energy conservation such as initial illuminance correction control, passive sensor control, the brightness sensor control and dimming control. b. Reference value 2: the intrinsic energy consumption efficiency meets the standard of the applicable category in Table 1-2. c. Average color rendering index Ra of products are 80 or more. Exceptionally, average color rendering index Ra of downlights and high ceiling luminaries is 70 or more. (2) Floodlight and security light shall satisfy the following requirements. a. Intrinsic energy consumption efficiency meets the standard of the applicable category in Table 2. b. Average color rendering index Ra of products are 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 initial illuminance correction control, passive sensor control, the brightness sensor control and dimming 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, shall 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.

Notes:

1. ***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 floodlight and security light. 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. In addition, the guidance light specified in the "Guidelines for guidance lights and guidance signs (1999 Public Notice No. 2 of the Fire and Disaster Management Agency)" shall not be included in LED lighting equipment.
2. ***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 equipment 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.
3. 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).
4. ***Downlight*** in this section of LED lighting equipment denote the one specified in JIS Z 8113:1998" Lighting vocabulary."
5. ***High ceiling luminaire*** in this section of LED lighting equipment denote the one with 11,000lm or more of luminous flux specified in JIS Z 8113:1998" Lighting vocabulary".
6. ***Floodlight*** in this section of LED lighting equipment denote the one specified in JIS Z 8113:1998" Lighting vocabulary."
7. ***"Security light"*** in this section of LED lighting equipment denote the lighting lamps aimed at securing the necessary illuminance from the viewpoint of prevention of crime and securing safe passage through installation on a road or the like.
8. ***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).

9. 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***.
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. The standard content rate of specified chemical substances denotes the standard rate provided by JIS C 0950 (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.
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, is protected. In addition, the guidance light specified in the "Guidelines for guidance lights and guidance signs (1999 Public Notice No. 2 of the Fire and Disaster Management Agency)" shall not be included in LED lighting ***equipment***.
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 makes 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 1-1: Reference value 1 of Intrinsic Energy Consumption Efficiency of LED Lighting Equipment (excluding floodlight and security light)

Light source color	Intrinsic energy consumption efficiency
Daylight	144lm/W or more
Daylight white	
White	
Warm white	102lm/W or more
Usual electric bulb color	

Notes:

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 color rendering property) (same applies Table 1-2 and Table 2).

2. Equipment 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 downlights of mount hole size for equipment are 300 mm or smaller, emitting color of daylight, daylight white, white, standard of intrinsic energy consumption efficiency shall be 114 lm/W or more, as for warm white and usual electric bulb color, standard of intrinsic energy consumption efficiency shall be 96lm/W or more.
4. As for high ceiling luminaire emitting color of daylight, daylight white, white, standard of intrinsic energy consumption efficiency shall be 156 lm/W or more.

Table 1-2: Reference value 2 of Intrinsic Energy Consumption Efficiency of LED Lighting Equipment (excluding floodlight and security light)

Light source color	Intrinsic energy consumption efficiency
Daylight	120lm/W or more
Daylight white	
White	
Warm white	85lm/W or more
Usual electric bulb color	

Notes:

1. As for downlights of mount hole size for equipment are 300 mm or smaller, emitting color of daylight, daylight white, white, standard of intrinsic energy consumption efficiency shall be 95 lm/W or more, as for warm white and usual electric bulb color, standard of intrinsic energy consumption efficiency shall be 80lm/W or more.
2. As for high ceiling luminaire emitting color of daylight, daylight white, white, standard of intrinsic energy consumption efficiency shall be 130 lm/W or more.

Table 2: Standard of Intrinsic Energy Consumption Efficiency of floodlight and security light

Light source color	Intrinsic energy consumption efficiency	
	Floodlight	Security light
Daylight	105lm/W or more	80lm/W or more
Daylight white		
White		
Warm white	90lm/W or more	Not coverd
Usual electric bulb color		

(2) Target Setting Guideline

Ratio of the number of LED lighting equipment excluding floodlight and security light meeting the criteria of each reference value 1 and reference value 2 to the total number of products to be purchased (including lease/rental agreements) in the fiscal year.

For floodlight and security light, ratio of the number of meeting the criteria to the total number of products to be purchased (including lease/rental agreements) 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) Self-ballasted LED-lamps meet the following criteria. a. If the type and shape of the lamp is type A and the type of base is E26 or E17, meet the criteria for each classification of light source color shown in Table 1. b. Other than above a., lamp efficiency meets the standard for the applicable category of light source color in Table 2. However, for reflective lamps whose divergence is less than 90 degrees, the lamp efficiency is no less than 50lm/W. c. Average color rendering index Ra of 70 or more. d. 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 meet the following criteria. a. Energy consumption efficiency is not lower than the standard energy consumption efficiency of applicable category in Table 3. b. No more than average 4 mg encapsulated mercury per product. c. Rated life is 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.

Notes:

1. ***Self-ballasted LED lamps*** and ***Self-ballasted fluorescent lamps*** under consideration in the evaluation criteria in this section fit directly into an 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. Equipment 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. ***Self-ballasted LED lamps*** in this section denotes white LED light bulb-shaped lamps used for general lighting purpose.
6. ***The lamp type and shape is type A*** of the bulb-shaped LED lamp of this section means that the symbol indicating the type and shape prescribed in JIS C 8158 (bulb type LED lamp for general lighting (power supply voltage is over 50 V)) is "type A (LDA) ".

   The type of base is E26 or E17 means that the symbol representing the type of mouthpiece of JIS is "E 26" or "E 17".
7. ***Rated life*** of ***Self-ballasted 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).
8. ***Rated life*** of Self-ballasted fluorescent lamps in this section refers to the short one either the total amount of lighting time until lamps 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).
9. When procuring lamp for emergency lighting equipment, each procurement organization confirms the applicability of the equipment enough.

Table 1: Standard of Lamp Efficiency for Self-ballasted LED Lamps of type A (E26 and E17 base)

Light source color	Lamp efficiency
Daylight	110.0lm/W or more
Daylight white	
White	
Warm white	98.6lm/W or more
Usual electric bulb color	

Notes:

When any of the following applies, the criteria for each division of light source color shown in Table 2 shall be satisfied.

1. Those with a power supply voltage of 50 V or less.
2. Those having an average color rendering index Ra of 90 or more.
3. Those with dimmer compatible function.

Table 2: Standard of Lamp Efficiency for Self-ballasted LED Lamps (excluding type A (E26 and E17 base))

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

Notes:

For the Self-ballasted 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 2. The lamp efficiency of that is assumed to be the ratio calculated from the total luminous flux at the maximum power consumption.

Table 3: 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

Notes:

1. Equipment that meet any of the following criteria will not be considered as ***Self-ballasted fluorescent lamp*** under consideration in the evaluation criteria.
   (1) Ones structured as to have a reflector.
   (2) Ones having a function to regulate light.
   (3) Ones designed for use in henhouse.
   (4) Ones allowing separation of fluorescent lamp.
   (5) 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," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of Lighting equipment that uses only fluorescent lamps as the main light source (Ministry of Economy, Trade and Industry Notification No.54 of 2010).

(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 2. 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 9. **Factors for Consideration** (1) Global warming potential of the material used for air conditioner is 150 or small. (2) 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 Act on the Promotion of Effective Utilization of Resources. Especially, if the components include rare metals, reusing them should be taken into consideration when designing the products. (3) The item uses recycled material as much as possible. (4) Plastic or synthetic fiber made from plant whose reduction effect of environmental load has been confirmed is used as much as possible. (5) The eco-drive support function is installed.

Notes:

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. ***Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***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.
9. 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 in place.
10. For vehicles using diesel oil as fuel, it is necessary to proactively utilize biodiesel fuel mixed diesel fuel (B5) in the region where the supply system is already in place.

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

Category		Nitrogen oxide	Non-methane hydrocarbon	Carbon monoxide
Passenger vehicles	JC08mode	1.15g/km or less	0.013g/km or less	0.013g/km or less
	WLTCmode	1.15g/km or less	0.05g/km or less	0.025g/km or less
Small buses(1.7tons or less) Light-duty freight vehicles	JC08mode	1.15g/km or less	0.025g/km or less	0.025g/km or less
	WLTCmode	1.15g/km or less	0.05g/km or less	0.025g/km or less
Small buses(1.7tons or more) Medium-duty freight vehicles	JC08mode	2.55g/km or less	0.025g/km or less	0.035g/km or less
	WLTCmode	2.55g/km or less	0.075g/km or less	0.035g/km or less
Mini-size freight vehicles	JC08mode	4.02g/km or less	0.025g/km or less	0.025g/km or less
	WLTCmode	4.02g/km or less	0.05g/km or less	0.025g/km or less

Notes:

1. Particle-state matter should be extent considered that there is no exhaust.
2. ***Light-duty freight vehicles*** refer to freight vehicles with a gross vehicle weight of 1.7tons or less. The same applies below.
3. ***Medium-duty freight vehicles*** refer 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*** refer to mini cars among freight vehicles. The same applies below.
5. Depending on the measurement mode of the exhaust gas, the value in either JC08 mode or WLTC mode shall be satisfied.

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

Category	Standard fuel efficiency (minimum)		
	Gasoline	Diesel	LP Gas
Vehicle weight of less than 741kg	24.6km/L	27.1km/L	19.2km/L
Vehicle weight of 741kg or more, but less than 856kg	24.5km/L	27.0km/L	19.2km/L
Vehicle weight of 856kg or more, but less than 971kg	23.7km/L	26.1km/L	18.5km/L
Vehicle weight of 971kg or more, but less than 1,081kg	23.4km/L	25.8km/L	18.3km/L
Vehicle weight of 1,081kg or more, but less than 1,196kg	21.8km/L	24.0km/L	17.1km/L
Vehicle weight of 1,196kg or more, but less than 1,311kg	20.3km/L	22.4km/L	15.9km/L
Vehicle weight of 1,311kg or more, but less than 1,421kg	19.0km/L	20.9km/L	14.9km/L
Vehicle weight of 1,421kg or more, but less than 1,531kg	17.6km/L	19.4km/L	13.8km/L
Vehicle weight of 1,531kg or more, but less than 1,651kg	16.5km/L	18.2km/L	12.9km/L
Vehicle weight of 1,651kg or more, but less than 1,761kg	15.4km/L	17.0km/L	12.1km/L
Vehicle weight of 1,761kg or more, but less than 1,871kg	14.4km/L	15.9km/L	11.3km/L
Vehicle weight of 1,871kg or more, but less than 1,991kg	13.5km/L	14.9km/L	10.6km/L
Vehicle weight of 1,991kg or more, but less than 2,101kg	12.7km/L	14.0km/L	10.0km/L
Vehicle weight of 2,101kg or more, but less than 2,271kg	11.9km/L	13.1km/L	9.3km/L
Vehicle weight of 2,271kg or more	10.6km/L	11.7km/L	8.3km/L

Notes:

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 manual	Less than 741kg		20.9km/L
		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 than1,651kg	B1	9.4km/L
			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

Notes:

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.

Table 5: 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

Notes:

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 less than 16 tons		4.97km/L
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 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 manual	Less than 703 kg	A	14.8 km/l
			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	Manual	Less than 1,266 kg	A	11.3 km/l
			B	9.6 km/l

vehicles (limited to gross vehicle weight of 2.5tons or less)		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 is concerned.

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

13-2. 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.

Notes:

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.

13-3 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.

Notes:

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 (CO_2 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.

Notes:

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, etc.

(1) Items and Evaluation Criteria

Uniforms and work clothes	**Evaluation Criteria** Products whose fiber content (natural and chemical) includes polyester fiber and/or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber used except lining. If polyester fiber are used less than 50% by weight of all fiber except lining, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber except lining. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber used, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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) Fiber used for products contains 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 and/or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber used. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber used, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25%

	by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, also 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) Fiber used for products or accessories contains unused fiber or reconstructed fiber and bamboo 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.
Shoes	**Evaluation Criteria** Products whose fiber content on the upper (natural and chemical) includes polyester fiber and/or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber used except lining. If polyester fiber are used less than 50% by weight of all fiber except lining, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber except lining. (2) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (3) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. **Factors for Consideration** (1) A system is in place for the collection, reuse and recycling after product use. (2) Fiber used for products contains unused fiber or reconstructed fiber as much as possible. (3) Where plastics are used on the upper or the lower part, recycled plastics, plastics made from plants or synthetic fibers that have been confirmed to have an environmental impact reducing effect have been used 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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and Textile products, etc.
2. ***Weight of all fiber*** 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 plant that is acknowledged for its environmental load reduction effects may be include “the weight of all fiber” and “the weight of polyester fiber from recycled PET resins, the weight of polyester fiber from recovered fiber or synthetic fiber made from plant that is acknowledged for its environmental load reduction effects” .

3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
5. ***Unused fiber*** denoted fiber made from such as reusing short fiber produced during spinning (i.e. linter).
6. ***Reconstructed fiber*** denoted fiber made from linear form materials created by decomposition of recovered fiber.
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.
8. ***Upper material*** means the part material corresponding to the parts of JIS S 5050 (leather shoes) Appendix 1 "Name of each part", parts of decorative leather, waist, leather, wholecut and backstay.
9. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
10. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material which is included in plant based synthetic fiber to the weight of all fiber.
11. When cleaning the uniform and work cloths, 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 or JIS L 0001 (Textiles - Care labelling code using symbols).

(2) Target Setting Guideline

1. Uniforms and work clothes, shoes: ratio of the number of uniforms and work clothes or shoes that meets the criteria to the total number of those containing polyester fiber or plant 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 or plant based synthetic 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 and/or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber used. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber used, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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) Fiber used for products contains 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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fiber*** 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 plant whose reduction effect of environmental load has been confirmed may be include “the weight of all fiber” and “the weight of polyester fiber from recycled PET resins, the weight of polyester fiber from recovered fiber or synthetic fiber made from plant whose reduction effect of environmental load has been confirmed.”

3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
5. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
6. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material, which is included in plant based synthetic fiber to the weight of all fiber.
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.
8. ***Unused fiber*** denotes fiber made from such as reusing short fiber produced during spinning (i.e. linter).
9. ***Reconstructed fiber*** *denotes fiber made from linear form materials created by decomposition of* recovered fiber.
10. 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.
11. When cleaning the products, procurement organization should consider to choice 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 or synthetic fiber made form plant 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, fiber from recovered 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** Fulfill one of the following. (1) Recycled material including unused fiber, fiber from recovered fiber, recycled plastic and other recycled material makes up at least 25% of weight of entire product. (2) Products includes synthetic fiber made from plant fulfill one of the following. a. Products whose fiber content includes biodegradable synthetic fiber or plastic made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. b. Synthetic fiber or plastic made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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.

Notes:

1. ***Weight of entire product*** denotes that weight of all fiber, added resins and inorganic fraction, etc.
2. ***Unused fiber*** denoted fiber made from such as reusing short fiber produced during spinning (i.e. linter).
3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.

4. ***Fiber from recovered fiber*** denotes fiber made mainly from recovered fiber created by materially or chemically recycled.
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 material from part or all of products discarded after used , remnants discarded during the manufacturing process or defective articles (This excludes material that has been recycled in the same process of manufacturing the product).
7. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material, which is included in plant based synthetic fiber to the weight of all fiber.
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 fulfill one of the following. (1) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 25% by weight of all fiber used. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber used, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fiber used for products contains 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** Fulfill one of the following. (1) Comforters that use either as fiber (natural and chemical) for both cover and filling polyester fiber products fulfill one of the following. a. Polyester fiber from recycled PET resins accounts for no less than 50% by weight of all fiber of comforter's cover and the filling. If polyester fiber are used less than 50% by weight of all fiber of comforter's cover and the filling, accounts for no less than 10% by weight of all fiber of comforter's cover and the filling, and no less than 50% by weight of polyester fiber. b. Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber, and a system for collecting, reuse and recycling materials after product use is established. c. Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 25% by weight of both cover and filling polyester fiber used. (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) Fiber used for products contains 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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and fiber products, etc.
2. ***Weight of all fiber*** 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 fiber" and "the weight of polyester fiber from recycled PET resins or polyester fiber from recovered fiber."
3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
5. ***Unused fiber*** denotes fiber made from such as reusing short fiber produced during spinning (i.e. linter).
6. ***Reconstructed fiber*** denotes fiber made from linear form materials created by decomposition of recovered fiber.
7. ***Filling*** in the evaluation criteria for comforters refer to cotton, lamb wool, down and synthetic material that are used to fill comforters.
8. ***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.
9. 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 meets, of the criteria below, (1) for plastic, (2) for wood, and (3) for paper. In addition, items whose secondary material include wood meets (2) a, b, and c. Items whose secondary material include paper (with the exception of virgin pulp manufactured with lumber from thinning, or with recycled wood pieces obtained from plywood or lumber factories) meets (3) b. (1) Recycled plastic makes up no less than 10% in weight of all plastic used. (2) Fulfill the following d, and depending on the raw materials used, fulfill the following a, b or c. a. Lumber from thinning, recycled wood pieces obtained from plywood or lumber factories. b. Lumber from thinning is in compliance with the regulations concerning forestry in its country or geographical area of origin. c. Other than above a, lumber used as raw material is in compliance with the regulations concerning forestry in its country or geographical area of origin. d. Discharge rate of formaldehyde from materials is no greater than 0.02 mg/m²h, or the equivalent. (3) 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. c. Above b. does not apply recycled wood pieces obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter. **Factors for Consideration** (4) 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. (5) If the material includes wood, lumber that is used as the raw material (with the exception of lumber 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. (6) 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. (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 the collection and reuse/recycling of packaging, etc. is

	considered.
Mattresses	**Evaluation Criteria** (1) Products include polyester fiber or synthetic fiber made from plant used for filling components fulfill one of the following. a. Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 25% by weight of all fiber used. b. Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. c. Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (2) All fiber used for felt are 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.

Notes:

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 fiber*** 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 plant whose reduction effect of environmental load has been confirmed may be include "the weight of all fiber", "the weight of polyester fiber from recycled PET resins, the weight of polyester fiber from recovered fiber or synthetic fiber made from plant whose reduction effect of environmental load has been confirmed".
7. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.

8. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
9. 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 JIS 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

10. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
11. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material, which is included in plant-based synthetic fiber to the weight of all fiber.
12. ***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.)
13. ***Unused fiber*** denoted fiber made from such as reusing short fiber produced during spinning (i.e. linter).
14. ***Reconstructed fiber*** denotes fiber made from linear form materials created by decomposition of recovered fiber.
15. 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.
16. When procurement bed frame and mattress as a unit, each part shall comply with the respective criteria above.
17. Evaluation criteria (2) b for bedframes applies to the subject of Clean Wood Act.
18. Evaluation criteria (3) c for bedframes, for other than the subject of the Clean Wood Act, does not apply to virgin pulp manufactured with lumber from thinning, or virgin pulp manufactured by using recycled wood pieces such as obtained from plywood or lumber factories, material left over from forestry, or lumber with a small diameter.
19. Confirmation of the legality and the sustainability of the forest where pulpwood producing wood and paper originates from is to be conducted.
   a. For subject of Clean Wood Act, Wood-related Entities is in accordance with Clean Wood Act and the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline.

b. In the case of items other than subject to Clean Wood Act, to be conducted in accordance with the above Guideline. In addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.
Regarding raw timber where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, a supplier who owns raw materials or products etc. as of April 1, 2006, specifies the raw materials or products etc., and reports them in advance to the Forestry Agency once a year, and is a specified raw material or product etc. If it is stated in the certificate, the proof that it is a legal wood prescribed in the above guidelines is unnecessary.
The period of time for which this exceptional clause is applicable will be determined in consideration with market trend.

(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** Products whose main material is fiber content (natural and chemical) fulfill one of the following. (1) Polyester fiber products shall include polyester fiber from recycled PET resins. At least 50% by weight of all natural and chemical fiber used (excluding anti-slip coating) shall be polyester fiber 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). (3) Unused fiber makes up at least 50% by weight of the entire product weight (excluding anti-slip coating). (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used (excluding anti-slip coating) and bio-based synthetic polymer content rate accounts for no less than 10%. **Factors for Consideration** (1) Fiber other than polyester fiber from recycled PET resin should also be made of unused fiber or reconstructed fiber (excluding anti-slip coating). (2) Does not use bleaches.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and products, etc.
2. ***Post-consumer material*** refers to material or product discarded after used as a product.
3. ***Unused fiber*** denotes fiber made from such as reusing short fiber produced during spinning (i.e. linter).
4. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material, which is included in plant based synthetic fiber to the weight of all fiber.
6. ***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 Textile Products

18-1. Tents and Sheets

(1) Items and Evaluation Criteria

Tents	**Evaluation criteria** Products whose fiber content (natural and chemical) includes polyester fiber or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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.
Tarps	**Evaluation criteria** At least 50% by weight of fiber (natural and chemical) used in polyethylene fiber products shall be recycled polyethylene fiber. **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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and textile products, etc.
2. ***Weight of all fiber*** 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 fiber”, “the weight of polyester fiber from recycled PET resins or the weight of polyester fiber from recovered fiber”.

3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
5. ***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).
6. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material which is included in plant based synthetic fiber to the weight of all fiber
8. ***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 synthetic fiber made from plant, 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 and/or synthetic fiber made from plant shall meet one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) At least 50% by weight of fiber used in polyethylene fiber products shall be recycled polyethylene. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. **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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and textile products, etc.
2. ***Weight of all fiber*** 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 plant that is acknowledged for its environmental load reduction effects may be include “the weight of all fiber” and “the weight of polyester fiber from recycled PET resins, the weight of polyester fiber from recovered fiber or synthetic fiber made from plant that is acknowledged for its environmental load reduction effects”.
3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.

5. ***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).
6. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material, which is included in plant based synthetic fiber to the weight of all fiber.
8. ***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 plant based synthetic fiber meeting the criteria, to the total number of safety nets that use either polyester, polyethylene, or plant 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** Products whose fiber content (natural and chemical) includes polyester fiber and/or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber used. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber used, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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) 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. ***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 textile products, etc.
3. ***Weight of all fiber*** 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 plant that is acknowledged for its environmental load reduction effects may be include “the weight of all fiber” and “the weight of polyester fiber from recycled PET resins, the weight of polyester fiber from recovered fiber or synthetic fiber made from plant that is acknowledged for its environmental load reduction effects”.

4. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
5. ***Polyester fiber from recycled PET resins from recovered fibers*** denotes fiber made mainly from recovered fiber created through materially or chemically recycling processes.
6. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material which is included in plant based synthetic fiber to the weight of all fiber.
8. ***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 plant 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** 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 fiber. (2) A system for collecting and reuse 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.

Notes:

1. ***Weight of all fiber*** 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 fiber" 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*** denoted fiber made from such as 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 and reuse*** 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 should fulfill the below requirements c. and d.

c. The collected products must be reused.
d. The parts that cannot be reuse of collected products must material recycled, chemical recycled or 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 does not fall below the standard conversion efficiency at each category shown in Table 1. (2) Information for solar cell module and peripherals listed for each category in Appendix table 1 is publicly listed on website, etc., 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. (7) Regarding the solar cell module, the preliminary assessment of the environmentally conscious design listed in Table 2 is being conducted, and its contents can be confirmed. **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) At the time of removal of facilities, collection, reuse or recycling is possible by contractor of removal and disposal, and appropriate processing is possible for parts that are not reused or recycled. (4) In cases where secondary battery containing specified chemical substances is used, a collection and recycling system for the secondary battery is put in place. (5) Products that use aluminum alloy on the frame or platform of the battery module use an alloy that uses aluminum secondary ore (regenerated ore) as a part of its primary material. (6) Hazardous substances such as heavy metals are not used for manufacturing the products, or to reduce the amount used as much as possible.

Solar heating systems (for public and industrial use)	**Evaluation Criteria** (1) Fulfill one of the following criteria. a. For the liquid collecting type solar collector, the heat collection amount must be 8,372 kJ / (m2∗day) or more. b. For the air heat collecting type solar collector, the heat collection amount must be 6,279 kJ / (m2∗day) or more. (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) At the time of removal of facilities, collection, reuse or recycling is possible by contractor of removal and disposal, and appropriate processing is possible for parts that are not reused or recycled. (4) Products that use aluminum alloy on the frame or platform use an alloy that uses aluminum secondary ore (regenerated ore) as a part of its primary material. (5) Hazardous substances such as heavy metals are not used for manufacturing the products, or to reduce the amount used as much as possible.

Notes:

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. ***Heat collection amount*** is calculated in accordance with JIS A 4112: 2011 when the value obtained by subtracting the temperature is 10 K and the amount of solar radiation is 20,930 kJ / (m 2 day). The value is from the average temperature of the heat collection medium in the case of the liquid collecting type solar collector, and from the temperature of the inlet collection heat medium in the case of the air collecting type solar collector. ***Solar heating system*** that fills JIS A 4112:2011 meets evaluation criteria (1).
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.
   f. Upon removal or disposal of used solar power generation system, reuse or recycling shall be conducted from the viewpoint of resource recycling. For parts that could not be reused or recycled, proper treatment shall be carried out in accordance with its properties, etc. based on information on the content of harmful substances such as heavy metals.

Table 1: 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%

Table 2: Preliminary evaluation method etc., of environmentally conscious design related to solar cell module

Purpose	Evaluation item	Preliminary evaluation method etc.
Weight reduction / commonality	Weight reduction	Mass has been evaluated to reduce raw materials used for modules.
	Parts reduction	The number and type of parts used in the module have been evaluated.
	Parts commonality	The proportion of parts common to other models have been evaluated.
Use of recycled resources	Use of recycled resources	The proportion of parts using recycled resources among the parts used in the module has been evaluated.
Long-term use	Improvement of durability for long-term use	The reliability test result of the module has been evaluated.
	Improvement of contamination resistance	The contamination resistance of the module surface has been evaluated.
Ease of removal work	Ease of removal work	The structure that makes it easy to remove used modules (the time required for removal) has been evaluated.
Utilization of recyclable resources	Improvement of recyclability	The ratio of the mass of recyclable parts and materials among the overall module mass has been evaluated.
Easier dismantling / sorting process	Ease of frame disassembly	For separation processing, the structure of the module frame is easy to disassemble (the time required for removal) has been evaluated.
	Reduction of quantity and type of screws to be removed by frame disassembly	The number and type of screws to be removed during frame disassembly must be evaluated.
	Provide information for frame disassembly	Necessary information for disassembling/sorting, such as the method of fixing the frame is provided when removing the frame, or have a providing system.
	Ease of disassembling the terminal box	Whether the structure of the terminal box is easy to remove from the module (the time required for removal) is evaluated.
	Reduction of quantity and type of screws to be removed by disassembling the terminal box	The number and type of screws to be removed when removing the terminal box shall be evaluated.
	Provide information for frame disassembly	Necessary information for disassembling/sorting, such as the method of fixing the frame is provided when detaching the terminal box, or have a providing system.

Environmental conservation	Reduction of substances with environmental impact	Evaluate the mass of environmentally hazardous substances contained in the module, the mass of the raw material that becomes a load factor in the proper disposal / recycling process.
Provision of information	Information on use, maintenance and safety	Information on usage precautions, trouble diagnosis and measures, maintenance inspection / repair, safety etc. are provided or have a providing system.
	Provide necessary information for removal, dismantling, proper disposal / recycling	Necessary information for removal, dismantling, proper disposal / recycling is provided or provided or have a providing system.
Reduction of environmental impact at each stage of life cycle	Implementation of Life Cycle Assessment	The environmental impact at each stage of a series of life cycles from resource extraction, manufacturing stage, use stage, removal, dismantling, proper disposal / recycling is quantitatively evaluated.

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

Category	Items	Articles for confirmation
Solar cell module	Display of estimation device for generated energy (standard condition)	Annual estimated generated energy
		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. (Necessary information for proper disposal at the time of final disposal of used product, 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 inability to obtain the heating collection of evaluation criteria (1)	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	Disposal	Method of disposal, points to consider

collector and peripheries		when disposing, etc. (Necessary information for proper disposal at the time of final disposal of used product, 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.
Energy management system	**Evaluation Criteria** System that can visualize energy such as electric power used in the building by measuring at each point of acceptance, conversion transportation and consumption at each application, facility or equipment, etc. at the installation site, etc. **Factors for Consideration** A management system that efficiently controls facilities or equipment, etc.
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 equipment	**Evaluation Criteria** **<Common Criteria>** (1)No electric energy shall be used. (2)The type to be installed on faucets should be adaptable to a variety of faucets.

< 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.

(4) For Flow control valve, 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 proper flow shall not be more than 80% of that of the faucet without the aerator cap.
   b. The discharge rate at the installed place with the handle (lever) fully opened and at water pressure of 0.1 MPa shall not be less than the following table.

Table: Discharge rate of flow control valve by installation location

Installation locations	Discharge rate
Washroom	5L/minute
Kitchen	5L/minute
Shower room	8L/minute

(5)For faucet with the mechanism of stopping water at hand, equipped with the mechanism of discharging and stopping with such switches as buttons or sensors which are installed within the area of users' operation, which are independent from the discharge switching mechanism or flow and temperature adjustment mechanism.

(6) For faucet with the small volume discharging mechanism, the discharging power from shower head satisfies either of a or b below.
   a. Without the mechanism of aeration into the flow: 0.6N or more
   b. With the mechanism of aeration into the flow: 0.55N or more

Factors for Consideration

(1) Replacement water saving pieces should be easily replaceable with regular pieces.

(2) After installing the equipment, it shall have the usual feeling in use for use applications.

Notes:

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 equipment 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 flow rate setting is fixed type, and an adjustment valve that maintains water flow at a fixed rate regardless of the water pressure of either side of the 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 user's 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.
7. Among the control valves that maintain the flow at a fixed amount regardless of changes in the pressure at the inlet or the outlet of the valve, the faucet which has a control valve with variable flow amount settings.
8. Faucet with the mechanism of stopping water at hand refers to for kitchens or bathroom showers, refers to any one of two types of hot and cold water faucets: single, mixing, and thermostat.
9. Faucet with the small volume discharging mechanism refers to for bathroom showers, refers to any one of two types of hot and cold water faucets: single, mixing, and thermostat.
10. The measurement of the water spillage power in<Individual Criteria>6 of the Evaluation criteria prescribed in the "Technological Information Concerning the Criteria for Energy-saving of Houses and other Buildings and the Recognition of Low-carbon Architecture (method of measuring the designed amounts of primary energy consumption of residents)" by the Building Research Institute.

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.

Notes:

1. ***Sunlight adjustment film*** refers to films applied onto window glass of buildings and is 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. At the same time, disclose information on the environmental impact throughout the year.
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

1. 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).
2. 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).
3. 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.

4. For fuel cells, target is determined by the total capacity of power generation (kW) in the fiscal year.
5. For energy management system, the number of procurement in the fiscal year.
6. For garbage disposals, target is determined by the number of equipment to be purchased (including lease, rental agreements, and acquisition by companies commissioned to operate cafeterias) in the fiscal year.
7. For water saving equipment, 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.
8. 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.

Notes:

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 (Foods)

(1) Items and Evaluation Criteria

Quick cooking rice Non-perishable breads for an emergency Pilot breads	**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 foods, 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.

Notes:

1. ***Quick cooking rice, Non-perishable breads for an emergency, Pilot breads,*** and ***Retort processed foods, 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. Evaluation Criteria (1) concerning expiration date for ***Quick cooking rice*** and ***Pilot breads*** will be reconsidered taking into consideration future market movements.
5. Evaluation Criteria (2) concerning ingredients does not apply for the external package.

6. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
7. 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 fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber. If polyester fiber are used less than 50% by weight of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester from recovered fiber of PET resins accounts for no less than 10% by weight of all fiber used. **Factors for Consideration** (1) A system for collecting, reuse and recycling materials after product use is established. (2) Fiber used for products contains 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** Fulfill one of the following. (1) Polyester fiber products shall include polyester fiber from recycled PET resins. At least 50% by weight of all natural and chemical fiber used (excluding anti-slip coating) shall be polyester fiber 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). (3) Unused fiber makes up at least 50% by weight of the entire product weight (excluding anti-slip coating). (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used (excluding anti-slip coating) and bio-based synthetic polymer content rate accounts for no less than 10%. **Factors for Consideration** (1) Fiber other than polyester fiber 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 or synthetic fiber made from plant fulfill one of the following. (1) Polyester fiber from recycled PET resins accounts for no less than 25% by weight of all fiber. If polyester fiber are used less than 50% by weight

	of all fiber, accounts for no less than 10% by weight of all fiber, and no less than 50% by weight of polyester fiber. (2) Polyester fiber from recycled PET resins accounts for no less than 10% by weight of all fiber, and a system for collecting, reuse and recycling materials after product use is established. (3) Polyester fiber from recycled PET resins from recovered fibers accounts for no less than 10% by weight of all fiber used. (4) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 10%. (5) Synthetic fiber made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight of all fiber used and bio-based synthetic polymer content rate accounts for no less than 4%, 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.
Tarps	**Evaluation criteria** At least 50% by weight of fiber (natural and chemical) used in polyethylene fiber products shall be recycled polyethylene fiber. **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.

Notes:

1. ***PET resins*** denote material that use recycled PET bottles and textile products, etc.
2. ***Weight of all fiber*** 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 fiber”, “the weight of polyester fiber from recycled PET resins or the weight of polyester from recovered fiber”.
3. ***Recovered fiber*** denotes lint or cutting wastage created by the used clothing and used cloth material or generated from a weaving mill and from a sewing plant in the manufacturing process.
4. ***Polyester from recovered fiber*** denotes fiber made mainly from recovered fiber created by materially or chemically recycled.
5. ***Unused fiber*** denoted fiber made from such as reusing short fiber produced during spinning (i.e. linter).

6. ***Reconstructed fiber*** denotes fiber made from linear form materials created by decomposition of recovered fiber.
7. ***Post-consumer material*** refers to material or product discarded after used as a product.
8. ***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).
9. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
10. ***Bio-based synthetic polymer content rate*** denotes the rate by weight of plant-based material which is included in plant based synthetic fiber to the weight of all fiber.
11. ***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 is reused, material recycled and chemical recycled.

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

10. If the products had purchased for its own business, it will be excluded from consideration as stockpiles for disaster.
11. 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 exceed the smallest average duration listed in accordance with load resistance in Table below. (2) The product specifications 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.

Notes:

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 with 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

Common name	Main applications	Discharge test conditions			Smallest Average Duration	
		Load Resistance (Ω)	Discharge time per day	Cut-off voltage	Initial Usage	After 12 Months Storage and Recommended Period of Usage
D (61.5mm : 34.2mm)	Portable light	2.2Ω	Note1	0.9V	750minuits	675minuits
	Equipment and toys using motors	2.2Ω	1hour	0.8V	16hours	14hours
	Portable stereo	600mA	2hours	0.9V	11hours	9.9hours
C (50.0mm : 26.2mm)	Equipment and toys using motors	3.9Ω	1hour	0.8V	14hours	12hours
	Portable stereo	3.9Ω	Note1	0.9V	790minuits	710minuits
	Portable stereo	400mA	2hours	0.9V	8hours	7.2hours
AA (50.5mm : 14.5mm)	Digital camera	1,500mW 650mW	Note2	1.05V	40times	36times
	Portable light (LED)	3.9Ω	Note3	0.9V	230minuits	205minuits
	Equipment and toys using motors	3.9Ω	1hour	0.8V	5hours	4.5hours
	Toys(without motor)	250mA	1hour	0.9V	5hours	4.5hours
	CD player, electronic games	100mA	1hour	0.9V	15hours	13hours
	Radio, clock, Remote controller	50mA	Note4	1.0V	30hours	27hours
AAA (44.5mm : 10.5mm)	Portable light	5.1Ω	Note5	0.9V	130minuits	115minuits
	equipment used motor, toys	5.1Ω	1hour	0.8V	120minuits	105minuits
	Digital audio	50mA	Note5	0.9V	12hours	10hours
	Remote controller	24Ω	Note6	1.0V	14.5hours	13.0hours

Note 1: The cycle of 4 minutes discharge and 11 minutes discharge pause is continuously repeated for 8 hours.

Note 2: The cycle of 5 minutes discharge (alternate discharge of 1,500 mW for 2 seconds and 650 mW for 28 seconds) and the 55 minutes discharge pause are repeated continuously for 24 hours.
Note 3: The cycle of 4 minutes discharge and 56 minute discharge pause is continuously repeated for 8 hours.
Note 4: The cycle of 1 hour discharge and 7 hours discharge pause is continuously repeated for 24 hours.
Note 5: The cycle of 1 hour discharge and 11 hours discharge pause is continuously repeated for 24 hours.
Note 6: The cycle of 15 seconds discharge and 45 second discharge pause is continuously repeated for 8 hours.

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.

Notes:

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) 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 is 98 decibels or less. (3) The time for continuous run is three hours or more. However, cassette gas cylinder type is one hour or more. **Factors for Consideration** (1) The fuel cost efficiency is 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.

Notes:

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	

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

Table 2: 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

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

Portable power supply for emergency	**Evaluation Criteria** (1) Electric capacitance is over 100Wh. (2) The product specifications a period of over five years or the recommended expiration date is over five years. **Factors for Consideration** It is easy to separate and take into account ease of recycling and reduced environmental impact upon disposal.

Notes:

Portable power supply for emergency under consideration of the evaluation criteria in this section refers to an portable power supply for emergency for generating electricity using an air battery subject to charging and supplying power to devices such as mobile phones.

(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.

Notes: 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 (sewage sludge compost)	
		Road illuminations	LED road illuminations	
		Central divider block	Central divider block manufactured with recycled plastic	
		Tiles	Ceramic tiles	
		Doors and windows	Heat insulating sash, doors	
		Lumber, etc.	Lumber	
			Glued laminated timber	
			Plywood	
			Laminated veneer lumber	
			Cross laminated timber	

		Flooring	Flooring	
		Reconstituted wood boards	Particle board	
			Fiberboard	
			Wood-type cement board	
		Wood-plastic composite	Wood-plastic recycled composite	
		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	
			Toilet and urinals equipped with automatic flushing system	
			Toilets bowls	
		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) Be treated soil recycled from construction dirt. (2) Content and elution of toxic material such as heavy metals, etc., fulfill Regulation for Control of Soil Contamination (Regulation No. 53, 2002) and Environmental Standards for Soil Contamination (Ministry of Environment Notice No. 46, 1991).
	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 are identifiable.
	Caisson filler using copper slag	**Evaluation Criteria** Caisson fillers are 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 are 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 is 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 are 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 are identifiable.

Notes: 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.

Notes: 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.

Notes: 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 are identifiable.

Notes: 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 are identifiable.

Notes: 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.

Notes: 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 are identifiable.

Notes: 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 (including recycled wood pieces such as material left over from forestry and lumber with a small diameter) that does not contain harmful decays or cracks is used. **Factors for Consideration** In cases other than recycled resource such as left over from forestry and lumber with a small diameter, raw timber is to be obtained from a forest that is conducting a sustainable operation.

Notes: Confirmation of the legality and the sustainability of the forest where lumber from thinning originates from is, as for Wood-related Entities, to be conducted in accordance with Clean Wood Act and the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline. In order for the National agent to procure, it is necessary to take into consideration the operation situation etc. of the industry etc. concerning the proof of legality of the procured item.

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

Notes: 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.

Notes: 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 contains no less than 500kg in dry weight of such waste material per 1 ton of final product.

Notes:

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 fill 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 1m3 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 is 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.

Notes:

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 ***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 is 50.0% or more.

Notes:

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” (Ministry of Environment Notice No. 46, 1991), 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 (Regulation No. 53, 2002), 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="14">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>
</table>
</td>
</tr>
</table>

<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 contains 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>

Notes: 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 plant 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 plant 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.)

Notes:

1. ***Fermented compost using sewage sludge*** includes those used as a soil conditioner.
2. Material that satisfy the "Official standard of ordinary fertilizers" (Ministry of Agriculture, Forestry and Fisheries Notification No. 284) based on the provisions of Articles 3 and 25 of the Fertilizer Control Law (Act No. 127, 1957).

Road illuminations	LED road illuminations	**Evaluation Criteria** Road lighting facilities using LED, to satisfy one of the following criteria. (1) As road lighting equipment (Continuous lighting, sidewalk lighting, local lighting), meet all the following criteria. a. Standard apparent power is less than the value of the applicable design condition type in Table 1. b. Average color rendering index Ra of 60 or more. c. Rated life of LED module and control device of LED modules are at least 60,000 hours. (2) Tunnel lighting equipment (basic lighting) meet the following criteria. a. Standard apparent power is less than the value of the applicable design condition type in Table 2. b. Average color rendering index Ra of 80 or more c. Rated life of LED module and control device of LED modules are at least 90,000 hours. (3) Tunnel lighting equipment (entrance lighting) meet the following criteria. a. Standard apparent power is less than the value of the applicable category type in Table 3.

		b. Average color rendering index Ra of 60 or more. c. Rated life of LED module and control device of LED modules are at least 75,000 hours.

Notes:

1. 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).
2. ***Rated life*** denotes the average time that the residual ratio of lifetime of the LED modules of the same type produced over a period of time and the life of the LED module for the control device of the same type is 50%.***Rated life of the LED module*** denotes either a short time of the time until the LED module is not lit when used under the conditions prescribed or the total lighting time of up to the luminous flux is less than 80% of the values measured in the initial lighting stage (rated luminous flux of the LED module) (non-lighting regarded as).***Rated life of the control device for LED modules*** denotes the total lighting time of up to becomes unusable; the conditions of which the control device for LED module fails or the output power of the device is less than the rated output power when used under the conditions prescribed.

Table 1 : Standard apparent power for road lighting equipment(continuous lighting, sidewalk lighting, local lighting)

Category	Design conditions type			Standard apparent power
continuous lighting	A	2-lane road surface luminance 1.0 cd/m2 with sidewalk		125 VA
	B	2-lane road surface luminance 1.0 cd/m2 without sidewalk		
	C	3-lane road surface luminance 1.0 cd/m2 with sidewalk		180 VA
	D	3-lane road surface luminance 1.0 cd/m2 without sidewalk		
	E	2-lane road surface luminance 1.0 cd/m2 high-standard		175 VA
	F	2-lane road surface luminance 0.7 cd/m2 with sidewalk		95 VA
	G	2-lane road surface luminance 0.7 cd/m2 without sidewalk		
	H	3-lane road surface luminance 0.7 cd/m2 with sidewalk		125 VA
	I	3-lane road surface luminance 0.7 cd/m2 without sidewalk		
	J	2-lane road surface luminance 0.7 cd/m2 high-standard		120 VA
	K	average road surface luminance 0.5 cd/m2 with sidewalk		70 VA
	L	average road surface luminance 0.5 cd/m2 without sidewalk		
Side walk lighting	-	Average road surface illuminance 5 lx		20 VA
	-	Average road surface illuminance 10 lx		40 VA
Local lighting	M	crossroad(2-lane×2-lane)20 lx		160 VA
	N	crossroad(2-lane×2-lane)15 lx		125 VA
	O	crossroad(2-lane×2-lane)10 lx		95 VA
	p	crossroad(4-lane×2-lane)20 lx	for continuous	125 VA

		lighting	
		for the intersection corner cutting part	120 VA
Q	crossroad(4-lane×2-lane)15 lx	for continuous lighting	95 VA
		for the intersection corner cutting part	95 VA
q'	crossroad(4-lane×2-lane)10 lx	for continuous lighting	70 VA
		for the intersection corner cutting part	70 VA
R	crossroad(4-lane×4-lane)20 lx	for continuous lighting	125 VA
		for the intersection corner cutting part	120 VA
S	crossroad(4-lane×4-lane)15 lx	for continuous lighting	95 VA
		for the intersection corner cutting part	95 VA
T	crossroad(6-lane×4-lane)20 lx	for continuous lighting	125 VA
		for the intersection corner cutting part	120 VA
U	crossroad(6-lane×4-lane)15 lx	for continuous lighting	95 VA
		for the intersection corner cutting part	95 VA
-	T intersection(2-lane×2-lane) 20 lx		95 VA
-	T intersection(2-lane×2-lane) 15 lx		70 VA
-	T intersection(2-lane×2-lane) 10 lx		70 VA
-	T intersection(4-lane×2-lane)20 lx	for continuous lighting	125 VA
		for the intersection corner cutting part	120 VA
-	T intersection(4-lane×2-lane)15 lx	for continuous lighting	95 VA
		for the intersection corner cutting part	95 VA
-	T intersection(4-lane×2-lane)10 lx	for continuous lighting	70 VA
		for the intersection corner cutting part	70 VA
-	Y T intersection(4-lane×2-lane) 20 lx		125 VA
-	Y T intersection(4-lane×2-lane) 15 lx		95 VA
-	Y T intersection(4-lane×2-lane) 10 lx		70 VA
V	System to illuminate the background of the pedestrian 20 lx		180 VA

	-	System to illuminate the background of the pedestrian 10 lx	95 VA
	W	System to illuminate the background of the pedestrian 20 lx	180 VA
	-	System to illuminate the background of the pedestrian 10 lx	95 VA

Notes:

1. ***Design condition type*** is according to the "LED road and tunnel lighting introduced guidelines (draft)" (by Ministry of Land, Infrastructure and Transport, March 2015).
2. ***Standard apparent power*** is the value of the apparent power of the rated end-of-life of the LED road lighting.
3. Apparent power in the case of using a light bulb color LED is a standard 1.2 times the value in the above table of apparent power.

Table 2: Normal apparent power for Tunnel lighting fixture (standard lighting)

Category	Design condition type		Standard apparent power
General national highway, etc. Roadway width 6m to 7m (Including cross-section of the sidewalk)	x One-half reduction	design speed 40(km/h) 2-lane-lane 0.75(cd/m^2) zigzag alignment	40 VA
	z One-half reduction	design speed 50(km/h) 2-lane-lane 0.95(cd/m^2) zigzag alignment	50 VA
	bb One-half reduction	design speed 60(km/h) 2-lane 1.15(cd/m^2) zigzag alignment	65 VA
	x	design speed 40(km/h) 2-lane 1.5(cd/m^2) zigzag alignment	65 VA
	y	design speed 40(km/h) 2-lane 1.5(cd/m^2) face to face	40 VA
	z	design speed 50(km/h) 2-lane 1.9(cd/m^2) zigzag alignment	75 VA
	aa	design speed 50(km/h) 2-lane 1.9(cd/m^2) face to face	50 VA
	bb	design speed 60(km/h) 2-lane 2.3(cd/m^2) zigzag alignment	95 VA
	cc	design speed 60(km/h) 2-lane	65 VA

		2.3(cd/m^2) face to face	
National expressway, etc.	dd	design speed 70(km/h) 2-lane 3.2(cd/m^2) zigzag alignment	95 VA
	ee	design speed 70(km/h) 2-lane 3.2(cd/m^2) face to face	65 VA
	ff	design speed 80(km/h) 2-lane 4.5(cd/m^2) zigzag alignment	125 VA
	gg	design speed80(km/h) 2-lane 4.5(cd/m^2) face to face	95 VA

Notes:

1. ***Design condition type*** is according to "LED road and tunnel lighting introduced guidelines (draft) by Ministry of Land, Infrastructure and Transportation, March, 2015".
2. Standard apparent power is the value of the apparent power of the rated end-of-life of the LED road lighting.

Table 3: Standard apparent power for Tunnel lighting equipment (entrance lighting)

Type	Standard apparent power
NH 70W equivalent	50 VA
NH 110W equivalent	75 VA
NH 150W equivalent	105 VA
NH 180W equivalent	160 VA
NH 220W equivalent	205 VA
NH 270W equivalent	250 VA
NH 360W equivalent	290 VA

Notes:

Type refers to the LED tunnel lighting fixtures of high pressure sodium lamp equivalent.

Central divider block	Central divider block using recycled plastic	**Evaluation Criteria** Raw material contains 70% or more recycled plastic by weight. **Factors for Consideration** (1)A system exists for collection and reuse after removal. (2)Plastics used for products should be collected after use and do not interfere with re-recycling.

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	Ceramic 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" (Ministry of Environment Notice No. 46, 1991), 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 (Regulation No. 53, 2002), 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)	No preprocessing required

Paper sludge Aluminum sludge Polishing sand sludge Stone chips	
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 through themselves, while meeting any of the followings: (1) Sash using multiple glasses. (2) Double sash. (3) Door using insulation material or other effective method of insulation. **Factors for Consideration** (1) The measures of effective insulation or well-insulated material is used in the sash frame, the shoji frame or the glasses. (2) For sash and multiple glass defined in the Order for Enforcement of the Regulation for the Efficient Use of Energy (Law No. 267, 1979), Article 22, No. 2 and No. 3, the value of heat loss prevention performance is as small as possible if it is.

Note: Definition and method of measuring “The value of heat loss prevention performance" are based on "The standards of the judgment the sash of the performance improvement heat loss prevention building material manufacturers, etc. (Ministry of Economy, Trade and Industry Notification No. 234, 2014), and “The standards of judgment of heat loss prevention construction manufacturers, etc. related to the improvement of the performance of the pair glass (Ministry of economy, Trade and industry Notification No. 235, 2014).

Lumber, etc.	Lumber	**Evaluation Criteria** (1) Lumber from thinning and left over forest wood have a small diameter and lumber from thinning is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For cases other than above (1), the wood 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. However, recycled resources such as material left over from forestry and lumber with a small diameter will not be applied.
	Glued laminated timber Plywood Laminated veneer lumber Cross laminated timber	**Evaluation Criteria** (1) Lumber such as timber from thinning, obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter contain 10% or more by volume and also lumber that is used other than obtained from plywood lumber factories, material left over from forestry and lumber with a small diameter is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For cases other than above (1), raw material wood is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. However lumber obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter will not be applied. (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** (1) Lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. However, recycled resources such as obtained from plywood or lumber factories, material left over from forestry, lumber with a small diameter will not be applied. (2) For wood based materials, the utilization ratio of recycled resources and lumber from thinning should be as high as possible.

Notes:

1. ***Lumber, glued laminated timber, plywood, laminated veneer lumber and cross laminated timber*** 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 ***lumber*** and ***glued laminated timber*** etc., originates from is, as for Wood-related Entities, to be conducted in accordance with Clean Wood Act and the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline.

   Regarding raw timber where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, a supplier who owns raw materials or products etc. as of April 1, 2006, specifies the raw materials or products etc., and reports them in advance to the Forestry Agency once a year, and is a specified raw material or product etc. If it is stated in the certificate, the proof that it is a legal wood prescribed in the above guidelines is unnecessary. The period of time for which this exceptional clause is applicable will be determined in consideration with market trend.

Flooring	Flooring	**Evaluation Criteria** (1) Uses lumber from thinning, obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter and also lumber that is used other than obtained from plywood lumber factories, material left over from forestry and lumber with a small diameter is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (2) For cases other than above (1), raw material wood is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. However lumber obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter will not be applied. (3) If wood is used for the base material of flooring, timber from thinning as a raw material wood is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. (4) 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** (1) Lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. However, obtained from plywood or lumber factories, material left over from forestry, lumber with a small diameter and timber from thinning (Only when wood is not used for the base material) will not be applied. (2) For wood based materials, the utilization ratio of recycled resources and lumber from thinning should be as high as possible.

Notes:

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 of wood which becomes the raw material of flooring are as follows.
   A. In the case of using wood for the base material, Wood-related Entities must comply with the Clean Wood Act for the timber, 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)", which is incorporated herein by

reference. Also, in order for the state agencies procure, it is necessary to take into consideration the operation situation etc. of the industry etc. concerning the proof of legality of the procured items. For non-timber-related business operators, they shall be conducted in compliance with the guidelines. In order for a national agency to procure, it is necessary to take into consideration the operation situation etc. of the industry etc. concerning the proof of legality of the procured item.

B. For goods other than the item (a) above, it shall be carried out in compliance with the above guidelines. The certification system of forests, timber etc. by prefectures etc. can also be used for confirmation of legality.

Regarding raw timber where the contract between the lumber company and the processing and marketing companies has been made prior to April 1, 2006, a supplier who owns raw materials or products etc. as of April 1, 2006, specifies the raw materials or products etc., and reports them in advance to the Forestry Agency once a year, and is a specified raw material or product etc. If it is stated in the certificate, the proof that it is a legal wood prescribed in the above guidelines is unnecessary. The period of time for which this exceptional clause is applicable will be determined in consideration with market trend.

5. "When wood was used for the base material" of Evaluation Criteria (3), and "When using wood for the base material" in Factors for Consideration (1), "Wood was used as a base material for the base material of Note 4 Wood "refers to what is subject to the Clean Wood Act.

Reconstituted wood boards	Particle board Fiberboard	**Evaluation Criteria** (1) At least 50% (by weight) of the material consists of lumber from thinning, lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and lumber with a small diameter or plant fiber. In this case, it is possible to calculate the weight ratio blend ratio without accounting for adhesives, admixtures or the like (such as a phenolic adhesive in a particle board) having a volume ratio blend ratio of 20% or less in the whole recycled material. (2) Lumber as the raw material is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. However lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and lumber with a small diameter will not be applied. (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**

		(1) Lumber is to be obtained from a forest that is conducting a sustainable operation. However lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, material left over from forestry, shrubs, and lumber with a small diameter will not be applied. (2) For wood based materials, the utilization ratio of recycled resources and lumber from thinning should be as high as possible.
Reconstituted wood boards	Wood-type cement board	**Evaluation Criteria** (1) At least 50% (by weight) of the material consists of lumber from thinning, lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and lumber with a small diameter or plant fiber. In this case, it is possible to calculate the weight ratio blend ratio without accounting for adhesives, admixtures or the like (such as cement in a woody cement board) having a volume ratio blend ratio of 20% or less in the whole recycled material. (2) Lumber as the raw material is to be in compliance with the regulations concerning forestry in its country or geographical area of origin. However lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and lumber with a small diameter will not be applied. (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** (1) Lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. However lumber obtained from plywood or lumber factories, lumber recovered from dismantled structures, used crates, wood chips left over from paper manufacturing, logging scrap, shrubs, and lumber with a small diameter will not be applied. (2) For wood based materials, the utilization ratio of recycled resources and lumber from thinning should be as high as possible.

Notes:

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 particle board and fiberboard 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 addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.
3. Confirmation of the legality and the sustainability of the forest where Wood-type cement board originates from is, as for Wood-related Entities, to be conducted in accordance with Clean Wood Act and the Forest Agency's "Guideline for Verification on Legality and Sustainability of Wood and Wood Products (February 15, 2006)." For other than Wood-related Entities, to be conducted in accordance with the Forest Agency's Guideline.
4. 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.

Wood-plastic composite	Wood-plastic recycled composite	**Evaluation Criteria** (1) Materials that are recognized as recycled materials etc. are used at a weight ratio of raw materials of 60% or more (in the case where a plurality of materials are used, the sum of those materials) is used. (2) The woody material used as a raw material has 100% of the woody raw material recognized as a recycled material or the like. (3) There is no problem concerning the inclusion and elution of harmful substances such as heavy metals. (4) Plastics used for products shall be collected after use and shall not interfere with recycling **Factors for Consideration** There is a system to collect and recycle after removal.

Notes:

1. ***Wood-plastic recycled composite*** subject to the Evaluation criteria in this section shall be used for construction of the outer structure of the building, construction of the garden road in the urban park, maintenance work of the port green area.
2. Evaluation criteria (1) (2) and (3) according to the criteria stipulated in ***Wood-Plastic Recycled Composite*** specified in JIS A 5741.
3. Regarding Evaluation criteria (1) (3) and (4), ***Wood-Plastic Recycled Composite*** specified in JIS A 5741 4.2 Content Ratio of Recycled Materials, etc. Classification R60, R70, R80 and R90 satisfy 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.

Notes: 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 are small as small as possible.

Notes:

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 equipment capable of continuous lighting, LED lighting equipment and lighting control system that controls the equipment. It possesses 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.

Notes:

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	$E=19.4S^{0.737}$

Notes:

1. ***Oil-filled transformers*** refer to items that use insulation oil as the insulating material.
2. ***Molded transformers*** refer 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", based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of transformers (Ministry of Economy, Trade and Industry notification No.71 of 2012).

Air conditioning units	Cold and hot water absorption air conditioning unit	**Evaluation Criteria** (1) Coefficient of Performance for cooling is no less than what is designated in Table 1. (2) Integrated part load value for cooling is no less than what is designated in Table 2.

Notes:

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 105kW. However, equipment that uses wood pellets as a fuel is excluded.
2. Coefficient of performance and integrated part load value for cold and hot water absorption air conditioning unit shall be calculated in accordance with JIS B 8622.

Table 1: Coefficient of Performance for Cooling

Category	Coefficient of performance
Cooling capacity is lower than 352kW	1.20

Table 2: Integrated Part Load Value for Cooling

Category	Integrated part load value for Cooling
Cooling capacity is 352kW or higher	1.45

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.

Notes:

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.
   (1)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)
   (2)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) Annual Performance does not fall below the values listed in Tables. (2) Refrigerant does not include material capable of destroying the ozone layer.

Notes:

1. ***Gas engine heat pump air conditioner*** under consideration in the evaluation criteria includes units defined by JIS B 8627 whose rated cooling capacity is 28kW or more.
2. The calculation of Primary Annual Performance Factor (APFp) will be executed in accordance with JIS B 8627.

Table : **Annual Performance Factor**

Category	Annual Performance Factor (APFp)

Cooling capacity is 28kW or higher and lower than 35.5kW	1.22 or higher
Cooling capacity is 35.5kW or higher and lower than 45kW	1.37 or higher
Cooling capacity is 45kW or higher and lower than 56kW	1.59 or higher
Cooling capacity is 56kW or higher	1.70 or higher

Air conditioning units	Fan	**Evaluation Criteria** Uses premium efficiency motor.

Notes:

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-phase 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.

Notes:

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-phase 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 Recycled rigid PVC pipe for drainage and vent	**Evaluation Criteria** The item is recycled rigid polyvinyl chloride pipes for drainage or vent and the use ratio does 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.

Notes:

1. Evaluation criteria applies to the no pressure piping only when used rigid polyvinyl chloride pipes are used for the indoor drainage and vent, and for the outdoor drainage in facilities for drainage in the site.
2. "***Recycled rigid PVC pipe for drainage and vent***" is according to "recycled rigid polyvinyl chloride three-layer pipe" specified in JIS K 9797, "recycled rigid polyvinyl

chloride foamed three-layer pipe" specified in JIS K 9798 and "Recycled rigid PVC pipe for drainage" specified in AS58,

3. ***"Recycled material usage rate"*** refers to the ratio of ***"recycled polyvinyl chloride"*** made from rigid polyvinyl chloride pipes and fittings to the mass of the pipe.
4. ***"Reused polyvinyl chloride"*** according to JIS K 9797 3.a) 4), JIS K 9798 3.a) 4) and AS 58 3.1.

Table: Recycled Material Usage Rate

Classification of pipe	Type of pipe	Content ratio
Three layer pipes	Recycled rigid PVC pipe three layer pipes	50%
	Recycled rigid PVC pipe foam three layer pipes	30%
Single layer pipes	Recycled rigid PVC pipe for drainage	80%

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.
	Toilet bowls	**Evaluation Criteria** Amount of water flushed in one procedure does not exceed 6.5 liters.

Notes:

1. ***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.
2. Among the toilet bowls, high seat type and Japanese style toilet bowls are excluded.
3. In introducing the toilet bowls, sufficient consideration should be given to ensuring the drainage function of the entire drainage facility.

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** (1) Form utilizing recycled material has been confirmed for efficiency in construction and economy (material cost, reusability, cost of collection, recycling, etc.) that is equivalent to non-recycled examples. (2) Plastics used for products should be collected after use and do not interfere with re-recycling.

Notes:

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** (1) Lumber from thinning, obtained from plywood or lumber factories, material left over from forestry and lumber with a small diameter contain 10% or more by volume and also lumber that is used other than obtained from plywood lumber factories, material left over from forestry and lumber with a small diameter is 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 are to be in compliance with the regulations concerning forestry in its country or geographical area of origin. **Factors for Consideration** (1) Lumber that is used as the raw material is to be obtained from a forest that is conducting a sustainable operation. However, obtained from plywood or lumber factories, material left over from forestry, lumber with a small diameter will not be applied. (2) For wood based materials, the utilization ratio of recycled resources and lumber from thinning should be as high as possible.

Notes:

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)." In addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.
   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.

   In addition, plywood formwork should endeavor to be reused, even plywood form in which the display above a. and b. on the plate surface, the case where the display on the plate surface cannot be confirmed because of reusing, etc., it is considered as a designated item by the contractor of public works projects submit a document showing that using plywood form in which the display on the plate surface to the procurement organization.

   In addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.

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><td>Machine Type</td><td>Application</td></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><td>Machine Type</td><td>Application</td></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.

Notes: 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 55 ≤ P <103 103 ≤ P	102 105 105
Back hoes	P < 55 55 ≤ P <103 103 ≤ P < 206 206 ≤ P	99 104 106 106
Drag lines Clamshells	P < 55 55 ≤ P <103 103 ≤ P < 206 206 ≤ P	100 104 107 107
Front-end loaders	P < 55 55 ≤ P <103 103 ≤ P	102 104 107
Crawler cranes Track cranes Wheel cranes	P < 55 55 ≤ P <103 103 ≤ P < 206 206 ≤ P	100 103 107 107
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., complies with measures against soil contamination (Law No. 53, 2002) and the environmental standards for soil contamination (Ministry of Environment Notification No.46, 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.

Notes: 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	**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

	mad	solidification medicine along with construction can be decreased.

Notes: ***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.

Notes: 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.

Notes: 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 takes into consideration the use of rain water for sprinklers, as well as the securing of water and drainage for the plant beds.

Notes: 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, are made, such as introducing new equipment or facilities, refurbishment, operational improvement and energy management system or management method, including those listed in Table 2

Note:

Proposals for setting various goals necessary for implementing energy management at the government building concerned are included in the energy management method.

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.
Notes: 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** <Common Criteria> (1) 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 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 a 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) Recyclability 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 biomass and inks whose aromatic compounds are less than 1% are used. b. Chemical safety of inks is confirmed. (2) Digital Printing a. As for xerographic (Limited to dry toner method.), the toner is 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 is 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 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 a 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.

Notes:

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 procuring 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. Recyclability noted in Evaluation Criteria <Common Criteria> (2) and (3) should be listed in accordance with “Guidelines for Producing Recyclable Printed Matter” created by Paper Recycling Promotion Center and operated by Japan Federation of Printing Industries. However, it does not apply if recyclability ranking test for used paper is not provided in the material used.
5. ***Recyclability*** 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. Recyclability Ranking Test for used paper and method of display should take into account the investigation results of “Guidelines for Producing Recyclable Printed Matter” and make alterations as needed.
    a. When only material from rank A is used, ***May be recycled into printing paper*** must be indicated.
    b. When only material from rank A or B is used (with the exception of (1)), ***May be recycled into cardboard*** must be indicated.
    c. When material from ranks C or D is used, ***Unsuitable materials to recycling are used.***

    In addition, calendars bound and processed, if the binding part and the body paper can be separated, the recycling suitability should be displayed for each sheet of the body paper.
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 biomass*** refers to the proportion of biomass (the proportion of the content of renewable organic raw materials (including plant-derived oils and excluding fossil resources)) and the proportion of petroleum-based solvents (to the ink). The ratio of the content of the solvent contained in petroleum (fossil fuel) as a raw material) satisfies the requirements specified in the following table for each type of ink. UV inks contain less than 3% of VOC components (volatile organic compounds classified as "highly volatile organic compounds" and "volatile organic compounds" in the classification of chemical substances of the World Health Organization) and are recyclable. Judgment criteria <Individual matters> Pair criteria shall be deemed to be the type UV ink.

Ink types	Ratio of biomass content	Ratio of the solvent contained in petroleum
Sheet-fed printing ink	30% or more	30% or less
Offset printing ink for rotary press	20% or more	45% or less
Gold ink（Sheet-fed ink / offsset printing ink for rotary）	10% or more	25% or less
Journal ink（Non heat offset ink for rotary）	30% or more	30% or less

Notes:
1. Ink includes OP varnish and medium.
2. For oil-based business foam inks, apply the sheet-fed ink standard.

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 (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. Identifying the target substances of Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment

and Promotion of Improvements to the Management Thereof (Act No. 86 of 1999) (It is necessary to have SDS (Safety Data Sheet).).

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. Each procurement organization shall make digital calibration without using actual machine calibration equipment when proofreading printed matter so as to control VOC emissions as much as possible.
14. 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 addition, certification system of forest, timber, etc. by prefectures etc. can be utilized for confirmation of legality.

Table 1: Recyclability 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-ready 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-ready seals (all dissolve adhesive paper) ☆	**Other processing** Seals (with the exception of recycle-ready types)	**Other processing** Three dimensional printed material (lenticular lens used)	
(4) Others		**Foreign substance** Adhesive tape (recycle-ready type)	**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-ready types)	

Notes:

1. Each organization must confirm publishing in data base of “Producing Recyclable 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-ready seals, Recycle-ready 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 suppressing	Take one of the following measures. ・ Waterless printing system is introduced. ・ Damping water circulation system is introduced. ・ To introduce environmentally friendly dampening water that contributes to measures for VOC. ・ Automatic cloth washing is introduced or in case of automatic liquid washing, circulation system is introduced. ・ To introduce environmentally friendly detergents contribute to measures for VOC. ・ 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 suppressing		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.

Notes:

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. Environmentally friendly dampening water and environmentally friendly detergents in offset generation of VOC in the offset printing process were certified in the ***Green Printing Equipment Certification System*** operated by the Japan Printing Industry Association. For the etchant (dampening water) and detergent can refer to the certified product.
6. 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, installation of VOC processing equipment for covering waste clogs container and washing agent container, etc. , appropriate operation management for rotary printing process ***decrease of negative environmental impact of the printing machine*** in digital printing process and ***suppress noise and vibrations*** in binding treatment process.
7. ***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	Recyclability 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***	

Notes:

1. Refer to latest “Guidelines for Producing Recyclable Printed Matter, published in Producing Recyclable Printed Matter,” when filled in Material Confirmation Sheet about the printing material.
2. In case of using materials such as paper and ink that recyclability ranking test for used paper is not provided, fill out "Outside the rank" in the column of recyclability 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 introducing a waterless printing system, introducing a dampening water circulation system, introducing environmentally friendly dampening water, introducing automatic cloth cleaning, in case of automatic liquid cleaning, circulation system has introduced, introducing environmentally friendly cleaning agents, 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.

Notes: 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 fulfills the criteria below: (1) Cafeteria practices appropriate measures for recycle and reuse including the reduction in type and volume of garbage. (2) Dishes used are capable of repeated use. (3) Do not use single-use plastic containers, etc. in providing food and drink in the cafeteria. However, this item shall not apply in cases where it disrupts the eating and drinking of the user, and when there is no alternative means. (4) To grasp the amount of food waste emission, formulate plans and setting of goals for suppressing occurrence and recycling. (5) When the category of industry falls under in which the target value of suppression of food waste, etc. is set, the amount generated per unit food waste, etc., shall be less than its target value. (6) Ministerial Ordinance that specifies matters that should be standards for food-related business operators to promote recycling and recycling of food circulation resources (Ministry of Finance, Ministry of Health, Labor and Welfare, Ministry of Agriculture, Forestry and Fisheries, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure, Transport and Tourism, Ministry of the Environment Ordinance No.4, hereinafter referred to as Ministerial ordinance of Judgment Standards) or formulate plans to achieve the target value for the target year. (7) To make it possible to adjust the amount of food and drink to be provided or to reduce food loss such as leftover foods by providing a takeaway container when asked by consumers. (8) In order to reduce leftovers of food and drink, calls and enlightenment, etc. to the user are carried out by using postings in the cafeteria. (9) To grasp the amount of energy used (electricity, gas, etc.) and water usage amount accompanying the operation of the cafeteria, and to take measures for energy conservation and water conservation. **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, are composted with garbage. (3) Ingredients used in cafeteria are the one contributing to the promotion of utilization of the agriculture, forestry and fishery products in the region. (4) Sustainable raw materials are used if plant oils and fats are used as raw materials of processed foods and chemical products used in the cafeteria. (5) Dishes shall be used that can be used again by mending, or for which the reworked material are used.

	(6) Return and collect of the containers and packaging are executed to re-use. (7) Take measures for reduction of environmental impact associated with transportation of foodstuffs, etc.

Notes:

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. ***Recycling, etc.*** of the evaluation criteria (4) and (6) refer to recycling etc. based on the Law Concerning the Promotion of Recycling Food Cyclical Resources (Act No. 116 of 2000, hereinafter referred to as the ***Food Recycling Law***).
3. ***Suppression of the occurrence of food waste etc.*** of the evaluation criteria (4) and (5) refer to suppression of the occurrence of food waste etc. based on the Ministerial Ordinance of Judgment Standards).
4. With regard to evaluation criteria (5), in cases where it does not fall under the food waste generation large volume generation business operator under the Food Recycling Law, the amount of food waste generated per unit is below the target value or achieves the target value, regarded as conforming by formulating a voluntary plan to do.
5. With regard to evaluation criteria (7), when the cafeteria is asked to take out foods from the customer, provide container after adequately explaining hygiene precautions, such as food poisoning risks and handling methods. In addition, if the high risk of food poisoning etc., adjust amount of food not to customer's request and make efforts to avoid as much residue as possible, if items such as raw or half-raw foods or when the outside temperature is high in midsummer.
6. For evaluation criteria (9), it is applied when it is possible to grasp the energy usage amount and water usage amount accompanying the cafeteria operation.
7. ***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 (Law 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** 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) (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 are 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 is open to public. (2) Effort is made for recycling of long life coolant. (3) Concerning automobile maintenance, efforts are made for the adequate use of resources including energy and solvent; consideration is 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.

Notes:

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) To rationalize energy use based on management standards concerning facilities, measurement and recording, maintenance and inspection of facilities related to from the following a to d. a. Air conditioning equipment, ventilation equipment b. Boiler equipment, hot water equipment c. Lighting equipment, elevator, power plant d. Receiving and transforming equipment (3) Specify plans for energy conservation at the facility, select energy conservation measures to be implemented, and report the implementation status and countermeasure effect to the facility manager on a monthly basis based on the implementation standard etc., of the measures. Also, based on the implementation results of the countermeasures, review necessary energy saving measures. (4) 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). (5) 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. (6) For a building that conducted energy conservation diagnosis, measures to improve the operation of facilities and equipment etc., are being

	taken based on the results. (7) For facilities installing energy management system, measures are taken to visualize energy consumption and measures to improve energy consumption efficiency based on the analysis result of the data. (8) 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) Being considerate to building environmental health management standards etc. based on Act on Maintenance of Sanitation in Buildings (Act No. 20 of 1970). (2) 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 "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. (3) To reduce greenhouse gas emissions, based on analyzing and evaluating of energy use, etc. in detail, appropriately managing and operating facilities, equipment, etc. and systems. (4) Efforts should be made to utilize various tools for management and evaluation in the analysis and evaluation of energy management and use in facilities. (5) Personnel with expertise are placed involved in energy conservation, resource saving, waste emission control, etc. necessary for government building management, and continuous implementation of education and training, etc. to train engineers will be conducted. (6) 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.

Notes:

1. ***Stationed management*** refers to a system of management where personnel that performs the operation, surveillance, and daily inspection and maintenance, etc. is stationed on site.
2. Evaluation Criteria (2) to (5) for Government Building Management should be applied to the case where the scope of the business subject to the contract includes the contents related to the criteria.
3. The management standards on evaluation criteria (2) concerning government building management are based on Act on the Rational Use of Energy. (Law No. 49 of 1947) shown in Attachment 1, with reference of "The standard of judgement for a business operator concerning the rational use of energy in factories, etc. (Notification No. 66 of

the Ministry of Economy, Trade and Industry)", and shall decide upon consultation with the facility manager as necessary.

4. The plan concerning energy conservation at the facility in accordance with Evaluation Criteria (3) for Government Building Management shall be included targets for energy conservation, energy saving measures to be implemented and promotion system, etc. 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. In addition, energy saving measures to be implemented (including the implementation standards concerning the measures) shall be selected with reference to Appendix Table 2.
5. ***Building users*** refers to people who work in or visit the building.
6. 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.
7. ***Energy Conservation Diagnosis*** noted in Evaluation Criteria (6) referred to "22-1 Energy Conservation Diagnosis" section in this Basic Policy.
8. ***Energy Management system*** noted in Evaluation Criteria (7) referred to "19 Facilities" section Energy Management System noted in this Basic Policy.
9. ***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).
10. Factors for Consideration (4) ***Various management and evaluation tools, etc.*** includes manuals and guidelines prepared by academic societies, industry associations, etc.
11. From the viewpoint of promoting energy conservation and low carbonization, each procurement organization should pay attention to the following.
    a. With a multiple-year contract of government building management, set targets for greenhouse gas emission reduction, etc. according to the contract period, evaluate achievement situation every year and try to continuous improve operation. Even in the case of contracts for a single year, make efforts to ensure appropriate measures.
    b. Regarding the introduction of energy conservation diagnosis and energy management system, make efforts to positively respond by giving priority to possible facilities.

Appendix Table 1: Standards of Judgment for Business Operators on the Rational Use of Energy for Factories, etc. (abstract)

Object	Management	Measurement and Record	Maintenance and Inspection
Air conditioning equipment, Ventilation equipment	a. Set management standards concerning load reduction by management of blinds etc., operation time of facilities, indoor temperature, number of ventilation, humidity, effective use of outside	a. Management standards for measurement and recording of matters necessary for grasping the temperature, humidity and other air conditions and	a. Heat source equipment, heat conveyance equipment and air conditioner equipment constituting the air conditioning equipment are

Object	Management	Measurement and Record	Maintenance and Inspection
	air, etc. by limiting the section to be air-conditioned. The cooling / heating temperature shall be the management standard taking into consideration the setting temperature recommended by the government. b. Management of heat source equipment that performs combustion sets management standards on air ratio. c. Management of heat source equipment, heat conveying equipment and air conditioner equipment improves comprehensive energy efficiency of air conditioning equipment by setting cooling water temperature, cold / hot water temperature, pressure etc. according to changes in outside air conditions set management standard to make it. d. In the case where it is composed of multiple heat source machines, it is necessary to adjust the number of operating machines or select the operating equipment according to the seasonal fluctuation of the outside air condition and the load fluctuation, etc. so as to improve the total energy efficiency of the heat source equipment standards.	improving the efficiency of air conditioning are set for each section subject to air conditioning. Periodically measure these items and record the results. b. Heat source equipment, heat conveyance equipment and air conditioner equipment constituting the air conditioning equipment management standards related to measuring and recording matters necessary for improving the efficiency of individual equipment and the overall efficiency of the air conditioning equipment. Periodically measure these items and record the results. c. Establish a management standard for measurement and recording of items necessary for grasping the temperature, carbon dioxide concentration and other air conditions and improving ventilation	required to maintain heat insulation materials and heat insulation materials, to clog filters, to remove scale attached to condensers and heat exchangers, etc. Set management standards for maintenance and inspection of matters necessary for improvement of efficiency and overall efficiency of air conditioning equipment. Maintain regular maintenance and check, keep it in good condition. b. Setting management standards for maintenance and inspection of matters necessary for management of automatic control equipment of air conditioning equipment and ventilation equipment. Maintain regular maintenance and check, keep it in good condition. c. Fans, ducts, etc. constituting the ventilation facility set management

Object	Management	Measurement and Record	Maintenance and Inspection
	e. When the heat transport facility is composed of multiple pumps, the management standard is set so as to improve overall energy efficiency by adjusting the number of operating units or selecting operating equipment according to seasonal fluctuations and the like. f. In the case that the air conditioner equipment is composed of multiple air conditioners, in order to prevent mixing loss and to adjust energy efficiency more comprehensively by adjusting the number of operating machines or choosing operating equipment according to the state of load Set management standard to. g. For the management of ventilation equipment, limit the section to be ventilated, set management standards for ventilation volume, operation time, temperature, etc.	efficiency for each section to be ventilated. Periodically measure these items and record the results.	standards for maintenance and inspection of matters necessary for improving the efficiency of individual equipment such as filter clogging and overall efficiency of ventilation equipment. Maintain regular maintenance and check, keep it in good condition.
Boiler equip-ment, water heater equip-ment	a. The boiler facility sets management standards on the air ratio according to the capacity of the boiler and the type of fuel used. b. The management standard of a. is set to lower the air ratio with reference to the reference air ratio value on the	a. Boiler facility shall control the measurement and recording of matters necessary for improving the efficiency of boilers, such as the supply amount of fuel, the pressure of steam, the temperature of	a. Set management standards for maintenance and inspection of matters necessary for improving the efficiency of boiler facilities. Maintain regular maintenance and check, keep it in

Object	Management	Measurement and Record	Maintenance and Inspection
	boiler. c. The boiler facility sets management standards concerning the pressure, temperature and operation time of steam etc., operates appropriately, and eliminates supply of excessive steam and the like and supply of fuel. d. Water supply to boiler sets water quality management standards and controls water quality. Management of feed water quality is performed according to JIS B 8223 (water quality of boiler feed water and boiler water) (including standards equivalent to this). e. When using multiple boiler facilities, set management standards to improve overall energy efficiency, and set the number of suitable operating units. f. In the management of hot water supply facilities, management standards are set for items necessary for improving the supply point, supply hot water temperature, hot water supply pressure, hot water supply pressure and other hot water supply efficiency according to the season and work content. g. In management of heat source facilities of	hot water, the amount of oxygen remaining in exhaust gas, the temperature of waste gas, boiler feed water volume Set standards. Periodically measure these items and record the results. b. Hot water supply facilities set management standards related to measurement and recording of matters necessary for improving the water supply volume, hot water supply temperature and other hot water supply efficiency. Periodically measure these items and record the results.	good condition. b. Establish management standards for maintenance and inspection so as to prevent heat retention and insulation of boiler facilities, steam leakage of steam trap, and clogging. Maintain regular maintenance and check, keep it in good condition. c. The hot-water supply facility sets items necessary for improving hot-water supply efficiency, such as removal of scale attached to the heat exchanger, and management standards for maintenance and inspection of matters necessary for management of the automatic control device. Maintain regular maintenance and check, keep it in good condition.

Object	Management	Measurement and Record	Maintenance and Inspection
	hot-water supply facilities, management standards are set to improve comprehensive energy efficiency including auxiliary equipment such as heat source equipment and pumps according to load fluctuations. h. When the heat source equipment of the hot water supply facility consists of multiple heat source equipment, the management standard is set so as to improve the overall energy efficiency of the heat source equipment by adjusting the number of operating units according to the load condition.		
Lighting equipment, elevator, power plant	a. The lighting equipment is used after setting the management standard according to JIS Z 9110 (Illuminance standard) or Z 9125 (Lighting standard of indoor workshop) and standards conforming to these standards. In addition, a management standard is set so as to eliminate excessive or unnecessary lighting, and dimming or turning off is performed by dimming. b. The elevator sets a management standard concerning the limitation of the stopping floor due to the time zone, the day of the week, etc., the	The lighting equipment management standards related to measuring and recording the illuminance of the work place where the lighting is applied. Measure regularly and record the result.	a. Lighting equipment management standards concerning maintenance and inspection such as cleaning of lighting fixtures and lamps, replacement of light sources, etc. Maintenance and inspection at regular intervals. b. The elevator sets management standards for maintenance and inspection so as to reduce the mechanical losses

Object	Management	Measurement and Record	Maintenance and Inspection
	limitation of the number of operating units when there are plural units, and performs efficient operation.		of the equipment that serves as the load of the electric motor, the power transmission part, and the electric motor. Maintenance and inspection at regular intervals. c. Power facilities such as plumbing and drainage facilities, machine parking facilities, etc. shall be managed in accordance with the standards for maintenance and inspection so as to reduce the mechanical losses in the load machine (meaning the machine serving as the load of the motor, the same shall apply hereinafter), the power transmission unit and the motor The set. Maintenance and inspection at regular intervals. In addition, when the load machine is a fluid machine such as a pump or a fan, control standards for maintenance and inspection are set so as to prevent fluid leakage and

Object	Management	Measurement and Record	Maintenance and Inspection
			to reduce the resistance of piping and ducts transporting fluids. Maintenance and inspection at regular intervals.
Receiving and transforming equipment	a. Transformers and uninterruptible power supply units shall be set up with management standards so that the overall efficiency of the transformer and uninterruptible power supply will be high considering the efficiency at partial load and the adjustment of the number of operating units and the appropriate load Distribute. b. The power factor at the power receiving end is managed by setting the management standard to control the phase advancing capacitor etc. based on the fact that the power factor is 95% or more.	Establishment of management standards concerning the measurement and recording of items necessary for reducing the amount of electricity used at offices and other business sites and the loss of electricity such as voltage and current of receiving and transforming equipment. Periodically measure these items and record the results.	Set up the management standards for maintenance and inspection so that the receiving and transforming equipment is kept in good condition. Maintenance and inspection at regular intervals.

Appendix Table 2: Examples of Energy Efficient Strategies for Management and Use of Government Buildings

Facilities	Energy Efficient Strategies (examples)	Standards for Practice(examples)	
		Stationed Management	Non-Stationed Management

Common factors for heating and air-conditioning facilities	Change in standards for interior temperature and humidity	In accordance with season and outdoor temperature	Seasonally
	Setting the optimal operation and suspension of machines, including reduction of operation hours	Daily	Seasonally
	Setting the optimal 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	--
	Confirmation and prevention of mixing loss due to simultaneous use of cooling and heating	As needed	As needed
	Mount the temperature / humidity sensor in the proper position	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
	Implementation of Cool Biz / Warm Biz	Seasonally	Seasonally
	Sprinkling water on the rooftop, etc. during summertime	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 to capture optimum temperature outside air during nighttime outside air temperature is low	In accordance with season and outdoor temperature	--
	Prevention of short circuiting caused by the proximity of the inlet and the outlet	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
	Setting of zero-energy band to control temperature and humidity within a certain range	Daily	--
Central air conditioning system	For temperature management, set cold water is high, hot water is low, cooling water is low	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	--
Freezers	Optimization of freezer operation pressure	As needed	As needed
	Cleaning tube interior of equipment 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 equipment including manometers and sensors	Twice or more per year	Twice or more per year
	Maintenance of COP value (efficiency) in equipment	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 equipment 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 equipment including manometers and sensors	Twice or more per year	Twice or more per year
	Maintenance of COP value (efficiency) in equipment	As needed	--

Cooling tower	Optimization of cooling water inlet / outlet temperature	As needed	--
	Management and removal of filth from fillers, management of water quality	As needed	As needed
	Cleaning of cooling tower tank	As needed	As needed
	Check valve opening / closing state	As needed	--
	Maintenance of chemical components in cooling water	As needed	As needed
Heat storage tank	Implementation of optimum operation of water / ice heat storage amount in heat storage tank based on air conditioning load prediction etc.	As needed	--
	Optimization of temperature distribution in tank	As needed	--
Fan coil	Optimum operation of the fan coil for the perimeter(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
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
	Changing activation setting temperature of ventilation fan for waste heat	As appropriate	As appropriate
	Remove clogging of filters such as fans and ducts	As appropriate	As appropriate
	Setting the ventilation air volume to an appropriate value, reducing the amount of outside air	As appropriate	--
Pump related	Set up so that startup, stop, pressure, and flow rate of the secondary pump are optimized	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	--
Boilers	Appropriate setting of combustion equipment including air ratio, exhaust gas temperature, etc.	As needed	As needed
	Appropriate setting of pressure of steam etc., temperature of hot water	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(JIS B 8223)	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 equipment	As needed	--
Hot water supply facility	Limitation of hot water supply time and reduction of hot water supply range	In accordance with season and outdoor temperature	Seasonally
	Stop hot water supply such as hand wash place in summer	Daily in summer	Daily in summer
	Change of hot water supply temperature setting	In accordance with season and outdoor temperature	Seasonally
	For use, narrow down the branch valves of hot water in a range that does not interfere	As appropriate	As appropriate
Lighting facilities	Turn off excessive lighting in the work space, utilize natural lighting turn off the window area	Based on usage	Based on usage
	Dimming	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	--

	Partially turning off in overtime hours by concentrating overtime work areas	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(Fluorescent lamp, HID lamp, etc.)	Once every 2~3 years	Once every 2~3 years
	Initialization of initial illuminance correction at lamp replacement	Implemented at replacement	--
	Elimination of partitions	As appropriate	--
	Proper disposition of desks and work areas that are easy to turn off partially in the lighting range	As appropriate	--
	Frequent adjustment of solar timers	Once or more per month	Once or more per month
	Employment of area-specific lighting	As needed	--
	Displayed lighting range on light switch	As appropriate	--
	Operation check of lighting control equipment.	As appropriate	--
	Frequent manual turning off of light switches	As needed	--
Transportation system	Selective operation of elevators and escalators Controlling the number of elevators / escalators to be operated (limitation of stop floor, control of the number of operating units)	Daily	--
	Promotion of stairway use	Daily	--
	Cooperation with in-building delivery system	Daily	--
	Maintenance and inspection to reduce the equipment loss of the motor, the power transmission section and the motor losses	As appropriate	--
Plumbing and sanitary facilities	Confirmation of rust, corrosion and water leak in piping	As appropriate	As appropriate
	Improve energy consumption efficiency including auxiliary equipment such as heat source equipment and pump	As appropriate	--
	Narrowing of branch valves for water supply to an extent that does not result in inconvenience	As appropriate	As appropriate

	Stoppage of hot water in restrooms, etc. during summer	In accordance with season and outdoor temperature	Seasonally
Receiving and transforming electricity	Reconsideration of interior temperature of substations	Seasonally	--
	Frequent load adjustment by demand situation	As needed	--
	Thorough management of power factor using phase acceleration condensers	As needed	--
	Detachment of transformer in unnecessary period or time zone.	As appropriate	--
	Adjustment of the number of transformers operating and maintenance of proper load	As needed	--
	Adjust the number of uninterruptible power supply units in operation and maintain proper load	As needed	--
Others	Energy conservation in vending machines (turning off illumination, turning off the machine at night)	Daily	--
	Disconnection of the power of the office equipment during the period not in use such as lunch break	Daily	--
	Efficient use of blinds and curtains	Daily	--
	Confirmation of set values of target facilities/equipment, etc., measurement/recording of operation result	Daily	Once or more per month
	Understanding and utilization of energy data necessary for energy conservation	Daily	Once or more per month

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 using a chain saw for pruning, logging, etc., the chain saw oil must be biodegradable. (5) 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. (6) Equipment and tools used for landscape management should be selected upon taking into consideration their ability to decrease environmental load. (7) Using the planting material that substitute for the soil for landscape management as much as possible.

Notes:

1. ***Landscape management*** under consideration in Evaluation Criteria refers to the management of landscaping around government office buildings, etc. and rooftop landscaping, etc.
2. 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.
3. 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.

4. 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 (CO_2 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)

Smoke Detectors Test	**Evaluation Criteria** Fluorocarbons are not used in smoke bodies of smoke tester. **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.

Notes:

1. The Evaluation criteria in this section shall also be applied even when the smoke-free test is included in fire-fighting equipment inspection work etc.
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).

Cleaning	**Evaluation Criteria** (1) Products used for cleaning of government office buildings, when applicable to the specified items for procurement, 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 plant oil. However, sustainable raw materials are used if plant oils and fats are used as raw materials of detergents used for cleaning. (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 have the hydrogen ion concentration (pH) that is appropriate for their use. (4) Wax, cleaning agent used for floor maintenance, cleaning, etc. do not contain designated chemical material.as much as possible. (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.

Notes:

1. ***The use of sustainable raw materials*** in evaluation criteria (2) means that the manufacturer of the soap solution or soap creates a sustainable procurement policy pertaining to the raw materials and procures raw materials based on the policy.
2. For Evaluation Criteria (4) of Cleaning, each procurement organization should refer to Appendix 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. Recyclable 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.
3. 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.
4. ***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.
5. 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.

6. ***Designated chemical material*** noted in Factors for Consideration (4) of Cleaning refers to material that apply to "Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Act No. 86 of July 13, 1999)."
7. Each procurement organization shall take necessary measures to properly treat the waste liquid accompanying the cleaning work of buildings such as flushing washing liquid of floor maintenance agent.

Appendix 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
Recyclable 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.

Notes: ***Recyclable printed matter*** refers to printed matter on which the recyclability is displayed in the standards for judgments concerning printing (refer to ***printing*** section) of the printed matter.

Appendix 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

	Dirty paper (used sanitary paper, dirty paper due to food residue, etc.)
Material other than paper	Adhesive tape
	Iron on patch
	Metal used in files
	Film
	Styrofoam
	Cellophane
	Plastic products
	Glass products
	Cloth products
Carpet tile cleaning	**Evaluation Criteria** (1) The power consumption of the equipment used for cleaning is 0.22 kWh / m2 or less. (2) The amount of water used for cleaning is 40 L / m 2 or less. (3) The detergent etc. used for cleaning shall meet the criteria for judgment concerning cleaning (see Cleaning section). (4) The transparency of the recovered water which wash the tile carpet after completion of cleaning is 5 points or more **Factors for Considerations** (1) The detergent etc. to be used for cleaning is considered to reduce the amount used or to use the proper amount. (2) In the case where plant oils and fats are used as raw materials of detergent, sustainable raw materials are used. (3) The detergent etc. to be used for cleaning is those which do not contain designated chemical substances. (4) To make efforts to reduce energy such as electricity and water used for cleaning.

Notes:

1. Carpet tile cleaning under the evaluation criteria in this section denote remove the tile carpet laid, release dirt, disassemble and wash away at the work site or office etc., as well as leave no sewage so as to aspirate or dehydrate.
2. Transparency noted of in the evaluation criteria (4) is according to JIS K 0120.
3. ***Designated chemical material*** noted in Factors for Consideration (3) refers to material that apply to "Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof (Act No. 86 of July 13, 1999)."

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) Confidential treatment / Recycling management manifest indicating that proper processing of confidential documents has been performed 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 and 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.

Notes:

1. Each procurement organization 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. Each procurement organization should fully consider the following:
   a. For ordering treatment involving crushing noted in the 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).
   c. By referring to Appendix 1 shown in "Cleaning" in this section, set up a separation method according to the situation of the facility and remove materials that will inhibit the recycling of used paper shown in Appendix 2 and strive for appropriate sorted collection about.
3. A certification that indicates that the disposal of confidential documents noted in the 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.

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. are 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 are pharmaceutical products that have been approved of manufacture and sales through "Act on securing quality, effectiveness and safety of pharmaceuticals, medical equipment, etc.(Act No.145 of 1960)", 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 (Law No.20 of 1970).

(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 is being reviewed periodically. (2) System and organization for environmental conservation is being developed. (3) Measures are in place for eco-drive promotion. (4) Inspection and maintenance of cars for environmental protection including reduction of environmental pollutant emission and maintenance of energy efficiency is being conducted. (5) Modal shift is put in place. (6) Measures are put in place for improved efficiency in transportation and delivery. (7) 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 of 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 of 2014), based on the Regulation for the Efficient Use of Energy (Act No.49 of 1979). (2) Incorporation of fuel-efficient, low pollution cars 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 are 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) Efforts to reduce redelivery are being implemented. (6) Devices to promote eco-drive are in place as much as possible. (7) 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). (8) 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. (9) 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. (10) 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. (11)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).

Notes:

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. ***Establishment of mechanisms and systems for environmental conservation*** means to formulate plans and targets related to the environment, establish implementation systems for such plans, and promote efforts toward environmental conservation.
3. ***Eco-drive*** refers to “Recommendation for Eco-drive 10” published by Eco-drive Popularization Network (October 2012).
   Notes: (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 (3) 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.

5. ***Inspection and maintenance of cars*** in the evaluation criteria (4) 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.
6. ***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. However, if its main task does not involve trunk transport, the evaluation criteria (5) is not applied.
7. ***Measures are put in place for improved efficiency in transportation and delivery*** noted in evaluation criteria (6) 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.
8. ***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.
9. ***Fuel-efficient, low pollution cars*** in Factors for Consideration (2) should be referred to “13-1 Vehicles” in this Basic Policy.
10. ***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 is being reviewed periodically. (2) System and organization for environmental conservation is being developed**.** (3) Measures are in place for eco-drive promotion. (4) Inspection and maintenance of cars for environmental protection including reduction of environmental pollutant emission and maintenance of energy efficiency is being conducted. (5) Measures are put in place for improved efficiency in passenger transportation, or decrease in traveling distance of non-passenger occupied cars. (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)-(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 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 of 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 of 2014)) based on the Regulation for the Efficient Use of Energy (Act No.49 of 1979). (2) Incorporation of fuel-efficient and low pollution cars is 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 are 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.

Notes:

1. ***Eco-drive*** refers to "Recommendation for Eco-drive 10" published by Eco-drive Popularization Network (October 2012).
   Notes: (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. ***Establishment of mechanisms and systems for environmental conservation*** means to formulate plans and targets related to the environment, establish implementation systems for such plans, and promote efforts toward environmental conservation.
3. ***Measures are in place for eco-drive promotion*** noted in Evaluation Criteria (3) 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 (4) 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. ***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 (5) 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.
6. ***Fuel-efficient, low pollution cars*** noted in Factors for Consideration (2) should be referred to "13-1 Vehicles" section in this Basic Policy.
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.

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 is 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.

Notes:

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: (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 single-use plastic products, containers and packaging. (3) If providing foods, the following requirements shall be satisfied. a. It is necessary to understand the amount of food waste generated, to formulate plans and to set targets for restraining occurrence and recycling. b. To suppress the occurrence of food waste, announce to consumers, enlightenment, etc. are being carried out. c. To ensure sustainable production and consumption of raw materials in procurement of food, procurement policies on sustainability have been proclaimed. d. When the target value of suppression of food waste, etc. is applicable, the amount generated per unit such as food waste shall be less than this target value. e. To make sure that the implementation rate of recycling and utilization of food circulation resources has reached the standard implementation rate specified by ministerial criteria or plan to achieve target value in target year. (4) Among the containers and packages of products handled at stores, those that are premised on reuse must be returned and collected at the store. (5) In the case of providing single-use plastic shopping bags, all shopping bags to be provided is made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 10% by weight. **Factors for Consideration** (1) Containers and packaging of merchandise sold at the stores are reduced amount of through simplified packaging, etc. (2) When filling in beverages at a store and offering it, it is possible to correspond to reusable cup or bottle of customers. (3) In the case of providing single-use plastic shopping bags, all shopping bags to be provided is made from plant whose reduction effect of environmental load has been confirmed accounts for no less than 25% by weight. (4) When handling foods, treat foods produced using feeds, fertilizers, etc. manufactured by recycling food waste, etc. with priority. (5) To cooperate in efforts that contribute to reducing the environmental impact of the entire food chain, such as relaxing the delivery deadlines to reduce food losses.

Notes:

1. ***Original system*** noted in the 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 the 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.
3. ***Recycling etc.*** of the evaluation criteria (3) and factors for consideration (4) refer to recycling etc. based on Food Recycling Law.
4. ***Suppression of the occurrence of food waste etc.*** of the evaluation criteria (3) refer to suppression of the occurrence of food waste etc. based on the ministerial ordinance.
5. ***"Procurement policies on sustainability, etc.*** the evaluation criteria (3) c means policies that businesses showed in the direction of the environment, society, economic activities, etc. including a description on sustainable procurement.
6. ***Sustainable procurement*** means procurement that contributes to sustainable production and consumption, including procurement from producers and distributors that clearly indicate sustainability policy.
7. With regard to the evaluation criteria (4) d, in cases where it does not fall under the Food Waste Generation Large Volume Generation Business Operator under the Food Recycling Law, the amount of food waste generated per unit is below the target value or achieves the target value It is regarded as conforming by formulating a voluntary plan to do.
8. Evaluation criteria (4) means to install a collection box or the like so that when selling beverages using the reuse bottle at the store, the container packaging of the product sold can be returned or collected.
9. ***Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
10. ***Bio-based synthetic polymer content rate*** of the evaluation criteria (5) and factors for consideration (3) based on the bio-based synthetic polymer content is multiplied by the bio-based synthetic polymer content rate (ratio of the weight of the plant-derived material component contained in the plastics based on the plant to the plastic weight).

(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. (4) An original approach is put in place to reduce bags and packaging materials. **Factors for Consideration** (1) Control of volatile organic material is taken into consideration. (2) Efforts are 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) When providing plastic bags, plant-based plastic whose reduction effort of environmental load has been confirmed are used. (6) The introduction in the cleaning equipment, the machine, and air conditioning facilities, etc. of the energy conservation type are attempted.

Notes:

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 put in place for eco-drive promotion*** noted in the 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*** noted in the evaluation criteria (3) 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 is material recycled as much as possible.
6. ***Bag / packaging material*** refers to a bag for storing a cleaned goods or the like for take-out, a bag for preventing dust, dirt, or the like from adhering to the cleaned goods.
7. ***Original approach*** of the Evaluation criteria (4) is refers to recommend the use of eco-bags, etc. to confirm the intention of using take-out bags, etc. or any other action taken to encourage users to reduce their take-out bags and packaging in providing services.
8. Fuel-efficient, low pollution cars refer to “13-1 Vehicles” section***.***
9**.. *Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
10. Each procurement organization should use less bags and packaging materials, such as using eco bags when receiving cleaned goods.

(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 doesn'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 the 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) A collection box for beverage containers is set up and separate collection and recycling should be done according to the material of beverage containers. (6) 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) 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. (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 the collection and reuse/recycling of packaging, etc. is considered.

Notes:

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:
    (1) Those having storage space for goods kept at or near room temperature.
    (2) Compact table-top models used on tables.
    (3) Those intended to be used at specific places such as in vehicles.
    (4) 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 or 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. ***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.
6. Evaluation criteria (4) does not apply to the reuse parts.
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 (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. With regard to the evaluation criteria (5) , taking into account the number and place of vending machines to be installed and the amount of sales of beverages etc., it should be installed appropriately so as not to hinder collection.
10. ***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 the evaluation criteria (1) divided by the energy consumption efficiency (rounds off below the decimal point.).
11. 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]

Notes:

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)," based on "Criteria for judgment of manufacturers of energy consuming equipment etc. related to improvement of energy consumption performance of vending machines (Ministry of Economy, Trade and Industry Notification No.289 of 2007).

Table 2: 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, are used which fulfill those evaluation criteria. (2) Materials for packing and curing that can be used repetitive are used. (3) The collection of materials for packing is executed after the moving ends. (4) In the case of transportation with a car, fulfill following criteria. a. The state of energy use, as well as the effects of energy efficiency efforts is being reviewed periodically. b. System and organization for environmental conservation is being developed. c. Measures are in place for eco-drive promotion. d. 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 shall be made to contribute to decrease of environmental load. (2) As for packing and curing material, taking into account for saving resource such as aggregate packing or reduction of materials use. (3) As for packing and curing material, recycled material or plastic made from plant whose reduction effect of environmental load has been confirmed are used, also taking into consideration of ease of recycling and environmental load upon disposal. (4) 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 of 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 (Notification No.2 of 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).

Notes:

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 (4) are applied to the business that does transportation using the car, regardless of the main contractor or subcontract of the moving transportation business.
4. ***Establishment of mechanisms and systems for environmental conservation*** means to formulate plans and targets related to the environment, establish implementation systems for such plans, and promote efforts toward environmental conservation**.**
5. ***Eco-drive*** refers to “Recommendation for Eco-drive 10” published by Eco-drive Popularization Network (October 2012).
   Notes: (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.
6. ***Measures are in place for eco-drive promotion*** noted in the evaluation criteria (4) c. 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.

7. ***Inspection and maintenance of cars*** in the evaluation criteria (4) d. 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.
8. ***The appropriate proposal concerning the move transportation method*** of Factors for Consideration (1) applies to the contract type when the concrete suggestion is possible.
9. ***Recycled material*** denotes part or all of material once used as a part of a product that has been discarded, remnants discarded during the manufacturing process, or the recycle/reuse of defective articles. (This excludes plastic that has been recycled in the same process of manufacturing the product.)
10. ***Synthetic fiber whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
11. ***Fuel-efficient, low pollution cars*** in Factors for Consideration (4) b. should be referred to "13-1 Automobiles" in this Basic Policy.
12. ***Measures are put in place for improved efficiency in moving transportation*** noted in Factors for Consideration (4)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.
13. Each procurement organization notes 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 (Ministry of Health and Welfare Ordinance No. 35of 1971) 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, is used which fulfill those evaluation criteria. (2) Meet the evaluation criteria of ***printing*** when printing such as poster, leaflet and pamphlet. (3) The rest of handouts and printed matter shall be recycled. (4) Providing following information about the approach to decrease of environmental load to the meeting participant. a. Use of the public transportation b. Cool Biz and Warm Biz. c. Bring pens (5) If serving beverages, meet the following. a. Do not use single-use plastic products, containers and packaging. b. Served in the reusable cups or returned and collected container and packages. **Factors for Consideration** (1) For goods to be used for conferences, use existing items as much as possible. As for products used for packing or curing, when applicable to the designated procurement items, are used which fulfill those evaluation criteria. (2) To reduce paper resources by using terminals such as laptop computers and tablets. (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) When providing meals, do not use single-use plastic products, containers and packaging. (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).
   Notes: (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.

22-15. Providing imaging equipment, etc., as a service

(1) Items and Evaluation Criteria

Providing imaging equipment, etc., as a service	**Evaluation Criteria** (1) When installing devices related to providing imaging equipment, etc., as a service, the following requirements shall be satisfied. a. Copiers, Multifunction devices and Upgradeable digital copiers satisfy the evaluation criteria concerned in this basic policy. b. Printers and Multifunction Printers satisfy the evaluation criteria concerned in this basic policy. c. Fax machines satisfy the evaluation criteria concerned in this basic policy. d. Scanners satisfy the evaluation criteria concerned in this basic policy. e. Digital duplicators satisfy the evaluation criteria concerned in this basic policy. f. Collecting the provided equipment after the contract of providing imaging equipment, etc., as a service. Also recovery of parts and material recycling are put in place. In addition, for parts that cannot be reused or recycled from the collected equipment, after being reduced, etc., they are properly processed and not simply landfilled. (2) In the case of supplying cartridges, etc., it is necessary to meet the evaluation criteria concerned in this basic policy. (3) In the case of supplying paper, it is necessary to meet the evaluation criteria concerned in this basic policy if the paper corresponds to specified procurement goods. (4) To grasp the actual results of use of equipment related to providing imaging equipment, etc., as a service and make the following proposals based on the situation. a. Measures to reduce the amount of paper and toner or ink used in the case of equipment related to providing imaging equipment, etc., as a service. b. Product specifications and installed number of equipment related to providing imaging equipment, etc., as a service for reducing environmental impact. **Factors for Consideration** (1) When introducing copiers, multifunction devices and upgradeable digital copiers, use reproducing machines or partial reuse type machine as much as possible. (2) To recover used cartridges, toner containers, ink containers or photoconductors, and reuse or recycle the recovered parts. In addition, with regard to parts that cannot be reused or recycled, such as collected used cartridges, toner containers, ink containers, or photoreceptors, after being reduced, etc., they are properly processed and not simply landfilled. (3) Packaging materials used for equipment introduction and supply of

	consumables in providing imaging equipment, etc., as a service, are reused as much as possible, easy to reuse, and considered for recycling at the time of disposal and reduction of environmental impact.

Notes:

1. ***Devices related to providing imaging equipment, etc., as a service*** means Copiers, Multifunction devices, Upgradeable digital copiers, Printers, Multifunction Printers, Fax machines and Scanners subject to ***5. Imaging Equipment, etc.*** in this basic policy**,** and Digital duplicators subject to ***7. Office Equipment, etc.*** in this basic policy**.**
2. ***Cartridge, etc.*** means toner cartridges and ink cartridges subject to ***5-6 Cartridges, etc.*** in this basic policy.
3. ***Introduction*** of devices related to providing imaging equipment, etc., as a service means that the contractor introduces all or a part of the equipment related to providing imaging equipment, etc., as a service, and the contractor introduces items other than equipment at the same time.
4. ***Providing imaging equipment, etc., as a service*** subject to the evaluation criteria in this section is the provision of functions related to printing and output by the equipment providing imaging equipment, etc., as a service, either one of the following.
    a. Introduction of equipment, maintenance work and supplies of consumable used by the equipment concerned providing imaging equipment, etc., as a service.
    b. Introduction of equipment and maintenance work concerned providing imaging equipment, etc., as a service.
    c. Maintenance work of equipment and supplies of consumable used by the equipment concerned providing imaging equipment, etc., as a service.
5. Evaluation criteria (1) f. applicable to specified recycling industries under the Act on Promotion of Effective Utilization of Resources.
6. With regard to proposals of the evaluation criteria (4) a. and b., if it is possible to propose after consultation between the purchaser and the contractor, implement it at an appropriate time or periodically within the performance period of the business.
7. ***Measures to reduce the amount of paper and toner or ink*** of the evaluation criteria (4) a. includes double-sided printing (only in the case of equipment that do not apply the requirements for automatic duplexing function), reduction printing, promotion of consolidated printing, visualization of environmental load information (number of printed sheets, color printing ratio, duplex utilization rate, aggregate utilization rate, paper reduction rate, etc.) by the equipment panel, management of paper reusing function, toner or ink saving by software, user authentication and so on.
8. Evaluation criteria (4) b, taking into consideration the environmental impact reduction effect (reduction of power consumption, reduction of greenhouse gas emissions, consumption of consumable items, etc.), cost effectiveness and efficiency of procurement affairs, etc. This item applies when quantitative proposal is possible.
9. Factors for consideration (2) are applied when the contractor supplies a cartridge, a toner container, an ink container or a photoreceptor.
10. Each organization that procures will make efforts to examine countermeasures for reducing environmental impact, such as implementation of management by user authentication, suppression of usage of paper, etc.

(2)Target Setting Guideline

Ratio of the number of commissioned businesses including providing imaging equipment, etc., as a service that meet the criteria to the total number of commissioned businesses including providing imaging equipment, etc., as a service contracted in the fiscal year.

23. Trash bags, etc.

(1) Items and Evaluation Criteria

Plastic Trash bags	**Evaluation Criteria** (1) Fulfill one of the following. a. Plant based plastics whose reduction effect of environmental load has been confirmed shall be used at least 10% of the weight of the plastic. b. Recycled plastic shall be used at least 10% of the weight of plastic. (2) Information on the above pair or pair must be displayed. **Factors for Consideration** (1) To reduce the weight of a sheet as much as possible by make it thin. (2) A plant based plastic whose reduction effect of environmental load has been confirmed shall be used as high content rate as possible. (3) Product packaging or packaging should be as simple as possible, with consideration given to ease of recycling and reduction of disposal load.

1. ***Plastic Trash bags*** that are subject to the Evaluation criteria in this section are plastic trash bags intended to be used for the incineration of waste generated in general administrative affairs. This does not apply to cases where the quality and standards to be satisfied are specified in, where local governments have specified for waste disposal, or when they are used for special purposes.
2. ***Plastics whose reduction effect of environmental load has been confirmed*** denotes material whose reduction 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.
3. ***Bio-based synthetic polymer content rate*** based on the bio-based synthetic polymer content is multiplied by the bio-based synthetic polymer content rate (ratio of the weight of the plant-derived material component contained in the plastics based on the plant to the plastic weight).
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. ***Display information*** in Evaluation Criteria (2) means that the content ratio of plant based plastic in Evaluation Criteria (1) a. or recycled plastic in Evaluation Criteria (1) b. indicated on the product itself or product packaging, provided in catalogs or websites, etc.
6. The standard for content ratio of plant based plastic in Evaluation Criteria (1) will consider the market trends of products that meet the criteria and carry out examinations and raise them appropriately based on the Plastic Resource Recycling Strategy (May 31, 2019).

(2)Target Setting Guideline

Ratio of the number of plastic trash bags that meet the criteria to the total number of plastic trash bags purchased in the fiscal year.