

III. Guidelines for Preparing Medium- and Long-Term Plans by the Type 1 Designated Business Operator (except the Water Supply Industry, Sewer Industry, and Waste Processing Industry)

(1) Cogeneration Facility	-----	79
(2) Electrical Facility	-----	80
(3) Air Conditioning Facility, Hot Water Supply Facility, Ventilation Facility, and Elevators	-----	83
(4) Lighting Facility	-----	91
(5) BEMS	-----	92
(6) Utilization of Unused Energy	-----	92
Remark	-----	93

III. Guidelines for Preparing Medium- and Long-Term Plans by the Type 1 Designated Business Operator (except the Water Supply Industry, Sewer Industry, and Waste Processing Industry)

(Announcement No.1 of the Ministry of Education, Culture, Sports, Science and Technology, Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry, and Ministry of Land, Infrastructure and Transport Japan on February 26, 2004)

When the enterprises in the Type 1 Designated Business Operator (except water supply industry and sewer industry), formulate their Medium- and Long-term plans, the following items shall be referred to for accuracy.

(1) Cogeneration Facility

The following facilities, systems, and technologies (hereinafter referred to as “facilities”) are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures determined in the item “1. Energy Consumption Facilities” of the objectives of rational use of energy and systematic measure to be carried out regulated in the matters as standards for judgment (hereinafter referred to as “standards for judgment”) by manufacturers for the rational use of energy in factories or work places (hereinafter referred to as “objectives and measures part”).

Cogeneration Facility		
Facility/System/ Technology	Details	Industry/Process to be considered
Engine type cogeneration facility	Facility that utilizes the rotating power of the gas engine and diesel engine as prime motors for the driving force of the generator and compressor, and recovers the exhaust heat of cooling water of engines and exhaust gas and utilizes them for a heat source. This is especially effective in order to meet the large demand for hot water as well as the large demand for power or electric power	cogeneration facility
Gas-turbine type cogeneration facility	Facility that utilizes the rotating power of the gas turbine as a prime motor for the driving force of the generator and compressor, and recovers the exhaust heat of exhaust gas and utilizes it for a heat source. This is especially effective for the large demand for steam as well as the large demand for power or electrical power. The variable type is also useful changing the output balance between heat and electricity if the balance of the demand is irregular.	cogeneration facility

Fuel battery cogeneration system	System that utilizes electricity and hot water or steam using a fuel cell instead of a prime motor. This is effective for the large demand for hot water or steam as well as the large demand for electrical power.	cogeneration facility
----------------------------------	---	-----------------------

Effective Use of Exhaust Heat

Facility/System/Technology	Details	Objectives and measurers part
Exhaust heat utilization thermal heat production device	Absorption freezer and exhaust heat recovery absorption freezer that utilize the exhaust heat of cogeneration facilities as heat sources, and exhaust heat introducing absorptive water heater/chiller that utilizes the exhaust heat of cogeneration facilities as an auxiliary heat source.	Waste heat recovery facility
Exhaust gas utilization desiccant air conditioning system	Dehumidifying system that utilizes the exhaust heat of cogeneration facilities	Waste heat recovery facility
High-efficiency heat exchanger	Heat exchanger that increases the heat exchanging area in order to convert the exhaust heat of cogeneration facilities efficiently into hot water and steam	Waste heat recovery facility

(2) Electrical Facility

The following facilities are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures regulated in the item “1. Energy Consumption Facilities” of the objectives and measures part of the standards of judgment.

Power Substation and Power Distribution Facility

Facility/System/Technology	Details	Objectives and measurers part
Low-loss transformer	Transformer that uses low-loss magnetic materials and that has a low-loss structure	Electrical facility
Constant voltage constant frequency power supply (CVCF)	Device that supplies electricity with further stable voltage by using a voltage regulator such as on-load tap changing transformer, on-load voltage regulator, and induction regulator if the voltage drop is large or exceeds the permissible regulation even though the power distribution to the load center by high voltage and the reduction of system impedance are carried out.	Electrical facility

Number controlling device of transformers	Device that monitors the load factor of transformers and controls the number of the transformers for reducing no-load loss and enhancing the load factor by carrying out parallel and parallel off of the system	Electrical facility
Optimization of the capacity of a transformer	Technique to change the capacity of a transformer in accordance with electric consumption and load factor	Electrical facility
400 volts class wiring system	Wiring facility of the 3-phase 4-wire type wiring system of 400 V class for supplying electricity to air conditioning facilities, ventilation power facilities, sanitary power facilities, elevators, and lighting facilities. The system can reduce power distribution loss compared to that of 100/200 V class	Electrical facility
High efficient uninterruptible power system	Uninterruptible power supply that directly uses a commercial power source with a stable condition of power supply frequency and voltage and performs an inverter operation of the battery power source momentarily during power failure and frequency variation	Electrical facility
Battery facility for power storage	Storage facility that is highly efficient with large capacity, and is used for controlling the daytime peak demand and enhancing load factor. (NaS battery and Redox Flow battery)	Electrical facility

Improvement of Power Factor

Facility/System/Technology	Details	Objectives and measurers part
Phase advance condenser	Capacitor that improves the power factor of the receiving terminal in workplaces or facilities with a large amount of delayed reactive power by using an oil-filled or dry type power capacitor (phase advance capacitor) installed near the terminal and facilities	Electrical facility
Automatic power factor improvement device	Device that carries out introduction and opening of a progressing capacitor automatically to measure power factor of system and set the factor 1.0	Electrical facility

Motor figure phase advance capacitor	Device for improving the power factor of each facility by installing it to every single motor	Electrical facility
--------------------------------------	---	---------------------

High-Efficiency Motor

Facility/System/Technology	Details	Objectives and measurers part
High-efficiency motor	Induction motor that improves loss compared to a generic type motor by adopting a high-grade iron core and improving wound-rotors and cooling fans	Electrical facility
Permanent-magnet motor	Highly efficient synchronous motor with a permanent-magnet (PM) on its rotor that does not require power for its secondary coil	

Revolution Control Device

Facility/System/Technology	Details	Objectives and measurers part
Inverter control device	Device that controls the frequency and voltage supplied to motors for maintaining the flow rate of pumps and fans variable	Electrical facility
Poles converting motor	Motor that can change the number of the revolutions in steps by changing the number of the poles of a starter winding. Effective if the demand of speed change is fixed.	Electrical facility

Measurement Management Device

Facility/System/Technology	Details	Objectives and measurers part
Demand control device	Device that monitors maximum electric power continuously, alarms, and cuts load off before the power exceeds a set value	Electrical facility

(3) Air Conditioning Facility, Hot Water Supply Facility, Ventilation Facility, and Elevators

The following facilities are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures regulated in the item “1. Energy Consumption Facilities” of the objectives and measures part of the standards of judgment.

Air Conditioning and Heat Source Facility and System

Facility/System/ Technology	Details	Objectives and measurers part
Regenerative conditioning system	System that reduces the load changes of a heat source for air conditioning by using a thermal tank and enhances the efficiency of operation. The system that generates and stores heat during the night and that discharges it during the daytime in particular achieves energy conservation using night time power.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Heat storage system, with heat recovering heat pump	Device that recovers and stores the exhaust heat of a cooler and temperature difference energy during air conditioning to a thermal tank based on the heat pump cycle and utilizes them for heating space	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
High-efficiency turbo refrigerating machine	Machine with coefficient of performance (COP) of 6 or more during rating operation that enhances COP further if the machine carries out inverter force to the compressed system with low temperature of cooling water	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Chilled/hot-water coincidence supply heat pump	Pump that produces chilled water or chilled water and hot water simultaneously in accordance with requirements, and that is highly efficient since the device recovers heat.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Gas-engine heat pump system	System that carries out heating-cooling combination appliance by a heat pump of gas engine drive and absorbs and utilizes the exhaust heat of the engine during heating by an evaporator	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Multi-air conditioner with high efficiency	Air conditioner that is used as a unit air conditioning system with a DC motor installed to compressors and fans, and with further advanced compressors and enhanced heat exchangers of outdoor and indoor facilities	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Ice-storage multi-air conditioner	Air conditioner that is used as a unit air conditioning system by combining the systems of an ice storage tank and a multi-air conditioner and produces ices utilizing nighttime power and uses the ices for cooling during daytime	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Advanced double-effect absorptive chilled/hot water machine	Device that has the mechanism preheating air for combustion, absorbing solution or producing hot water by using exhaust gas generated during the regeneration or condensation processes of lean solution	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Large-temperature difference air conditioning system	System that reduces the carrier power by enlarging the circulation-temperature difference of a heating medium for air conditioning (water or air) by using an air conditioner or a heat exchanger with a large-temperature difference. It also improves the load factor of a heat source machine.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Outside-air utilization air-conditioning	System that reduces the energy consumption of a heat source by using outside air for cooling during interkinesis and winter season. If a heat exchanger is available, bypass technique is applied.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Far-infrared utilization heater	Device that directly heats human bodies rather than the surrounding air using far-infrared radiation; thus, the device is efficient	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Cool tube	Outdoor-air supply system that introduces outdoor air by means of an underground duct and reduces the outdoor-air load by utilizing the underground heat	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Chilled-water supply of cooling tower during winter season (free cooling)	System that utilizes the cooling water of a cooling tower for chilled water in case cooling load is observed during interkinesis and winter season so that an air conditioner works instead of a heat-source equipment for cooling	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Heat exchanger	Device that recovers sensible-heat and latent-heat of exhaust heat for supplying air and reduces outdoor-air load (total enthalpy heat exchanger)	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Exhaust-heat recovery heat-source system of freezer and refrigerator	System that recovers the exhaust gas of condensers of freezer or refrigerator at hotel and department stores and utilizes it as a heating source of air-conditioning heat pumps	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
--	---	--

High-Efficiency Boiler and Boiler-related Equipment

Facility/system/Technology	Details	Objectives and measurers part
Boiler exhaust-gas sensible-heat recovery device	Feed water supply preheating device for boilers (economizer) and air preheating devices for combustion (air preheater) using sensible-heat of exhaust gas. Combined use is effective for large boilers.	Waste heat recovery facility
Latent-heat recovering boiler	Boiler that enhances the heat efficiency by recovering the latent-heat in exhaust gas	Waste heat recovery facility
High-efficiency boiler	Device that utilizes the exhaust heat of combustion of boilers for preheating air or feed water-supply with 1.2 or less air ratio of rating and 90% of or more efficiency	Waste heat recovery facility
High-efficiency hot-water boiler	Boiler with a heat exchanger installed with the temperature of the exhaust gas set to 250 or less with 1.2 or less air ratio of rating and 88% of or more efficiency	Waste heat recovery facility
Separating-boiler system	System that performs optimum operation in accordance with the load of a factory using a computer if two or more boilers are installed separately	Heat utilization facility
Reinforcement of the heat-insulation of heat-source piping	Reduction of heat-emission loss from equipment and piping	Heat utilization facility
Prevention of draft	Technique to close the damper of a combustion-air duct while a boiler stops (depending on on-off controlling) and prevent dispersion of heated air in a furnace due to draft	Heat utilization facility

Optimum Control of Air-conditioning and Heat-source Facilities

Facility/System Technology	Details	Objectives and measurers part
Optimum stop-start control of air-conditioning facility	System that works air-conditioning facilities in order to set the optimum environment at the required times predicting room temperatures, and performs optimization of precooling and preheating. It is recommended that introduction of outdoor-air be controlled while the system works, and that the operation be stopped immediately while the system does not work owing to the optimized environment	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Outdoor-air intake control during precooling and preheating	System that stops outdoor air intake during precooling and preheating	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Night-purge control	Technique for introducing outdoor air comparing inside and outside temperatures before sunrise during cooling-required seasons. It is effective for buildings that are largely loaded by the office-computers during nighttime controlling the rise load of morning.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Optimum control of outdoor-air induction	System that controls outdoor air induction in a room accurately by using a carbon dioxide sensor	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Optimum control of setting temperatures of chilled/hot water supply	System that sets the temperatures of chilled/hot water supply from a freezer and a hot-water supplier optimally in accordance with the load and carrier power. Effective to enhance coefficient of performance (COP)	BEMS
Optimum control of the temperature of cooling water	System that sets the temperatures of cooling water optimally balancing the protection circuit of a freezer and maintaining the temperature of cooling water lower for enhancing the efficiency of a heat source equipment	BEMS
Operating number control of heat sources	System that operates number control of heat sources in accordance with the load of a workplace if multiple freezers are installed	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Reduction of Carrier Power for Air-Conditioning System

Facility/System/ Technology	Details	Objectives and measurers part
Reduction of the loss of water-air carrier	System that optimizes the pressure and automatic control	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Booster-pump system	System that reduces the lower-layer power of a main pipe in case the main pipe is long enough to reach the upper part	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Change of the inhalation interval of centrifugal impeller	System that optimizes the performance of a pump in accordance with the pressure of water requirement of a facility by controlling the inlet interval of the centrifugal impeller of a pump	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Water/hydrothermal transformer	Device that reduces carrier power by changing opening circuit to closed one using a heat-exchanger for water-supply circuit	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Flow-resistance reducing substance in pipes	System that reduces flow resistance in piping and carrier power blending a surface-active agent in a closed piping system	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Hydrate-slurry air-conditioning system (VCS)	System that reduces the carrier power using the mixed medium of hydrate slurry and aqueous solution as a heating carrier medium and carrying out high-density latent cold carrier	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Air Conditioning Associated Matters and Others

Facility/System/ Technology	Details	Objectives and measurers part
Heat-Insulation of interior walls, windows, and floors	System that performs heat insulation on the barrier between non-air conditioned area and residential area	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Heat insulation of exterior walls, windows, and floors	System that enhances the heat insulation of exterior walls, roof, windows, and floors and reduces heat transfer and heat emission	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Operating airtight treatment for buildings	System that carries out airtight treatment by using airtight sashes, wind break rooms, double doors, and rotary doors	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Greening of roofs and walls	Planting on roofs and walls for perspiration and cooling the buildings	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Shading	Shading with blinds, heat reflecting glasses, perm selective films, and heat insulated coating materials	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Optimization of air conditioning zones	Fragmentation of air conditioning zones in accordance with a time zone of consumption and loading configuration	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Perimeter-less air-conditioning system	System that prevents incoming perimeter-load into interior side in order to prevent mixing-loss due to simultaneous cooling/heating	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Hot-Water Supply Facility and System

Facility/System/Technology	Details	Objectives and measurers part
Natural refrigerant (carbon dioxide) heat-pump hot-water supplier	Equipment, composed of a heat pump unit and hot water supply unit, that has the capacity to heat up water to a maximum temperature of 90 ° C based on the heat-pump operation by adopting natural refrigerant (carbon dioxide) instead of CFCs that enables the instrument to obtain adequate high temperature to supply hot water and to reduce environmental impacts.	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
High-efficiency heat-pump hot-water supplier	Equipment, composed of a heat pump unit and hot water supply, that has the capacity to heat up water to a maximum temperature of 80 based on the heat-pump operation by adopting a new refrigerant (R410A) that enables the equipment to obtain high coefficient of performance (COP)	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Latent-heat recovery type hot water supplier	Supplier that reduces the temperature of exhaust air to approximately 80 by recovering the heat from condensing water vapor and heat from exhaust gas and utilizes the heat for preheating water supply although the traditional hot water supply that employs gas preheating emits exhaust gas with a temperature of approximately 200	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Hot-water supplier with a gas engine	Equipment, composed of gas engine and hot water supply unit, that generates power by using a gas engine, stores the exhaust heat of engine to a hot water supply unit and utilizes it	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
--------------------------------------	---	--

Rationalization and Optimization of Hot Water Supply Medium Transport Pipe

Facility/System/Technology	Details	Objectives and measurers part
Reinforcement of heat-insulation of piping	Reinforcement of heat-insulation of heat transport piping and connected part of pipes in order to prevent heat-loss	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Change of circulation hot-water supply to local hot-water supply	Change of the system to local hot-water supply for demanding places in order to reduce heat-loss of regular circulation hot-water supply	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

High Efficiency Ventilation Facility

Facility/System/Technology	Details	Objectives and measurers part
Variable air-volume ventilation device	Ventilation device that controls supply-exhaust air volume by inverters	Electrical facility
Local-exhaust system	System that carries out local exhaust of air polluting sources such as smoking area, combustion equipment, and copying machines and reduces air conditioning load	Electrical facility

Optimization of Ventilation Volume

Facility/System/Technology	Details	Objectives and measurers part
Ventilation control system depending on carbon dioxide or carbon mono-oxide concentration	System that is used for ventilation of the areas including parking area, measures carbon dioxide or its concentration, and controls the number of ventilation fans and revolutions for fixing the temperature of carbon dioxide or its concentration	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Ventilation -control system by using a temperature sensor	System that is used for ventilation of the areas including electric rooms and machine rooms and controls the operations of ventilation fans in accordance with the predetermined maximum and minimum temperatures	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Ventilation -control system depending on scheduling	System that schedules and controls operations in accordance with seasons and times to use warehouses and machine rooms. Recommended that intermittent operation be carried out with regular operations	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Optimum control system of kitchen-ventilation	System that control ventilation volume in accordance with the use of kitchen stoves	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Optimum-use system of surplus exhaust	System that exhausts surplus air to parking lots, machine rooms, and electric rooms and reduces the operations of exclusive ventilation fans	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Elevators

Facility/System/ Technology	Details	Objectives and measurers part
Group-management operation system	System that optimizes the operations of multiple elevators	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Inverter-control system	Method to control the revolution of roped elevators by an inverter	Electrical facility
Regenerative-power recovery system	System that recovers regenerative power by utilizing the function of the motor generating electric power (regenerative power) in accordance with the number of passengers in a car or its direction as it is loaded during operations	Electrical facility
PM gearless roller	Gearless winding machine that excels in energy efficiency and smoothly increases and decreases its velocities with less noises using a permanent magnet (PM) type synchronous motor	Electrical facility

Escalators

Facility/System/ Technology	Details	Objectives and measurers part
Automatic-control device	Device that detects the presence of passengers and operates the escalators automatically by using a photoelectric post installed at the front of escalator steps	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator

Number control	System that carries out operating number control of escalators in accordance with each time zone	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
----------------	--	--

(4) Lighting Facility

The following facilities are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures regulated in the item “1. Energy Consumption Facilities” of the objectives and measures part of the standards of judgment.

High-Efficiency Lighting Facility

Facility/System Technology	Details	Objectives and measurers part
LED lighting fixture	Lighting fixture that uses white-light-emitting diode (LED) for its light source and features less heating, miniature size, and long-life.	Lighting facility
Circuit separation of window-lighting	Technique to separate window lighting circuit for turning off the lighting during daytime	Lighting facility
Light-duct system	System that transmits solar radiation to rooms demanding lighting, regularly with auxiliary lighting, using the inside of a duct as a mirror	Lighting facility
High-reflective panel	Panel used for lighting of a fluorescent lamp	Lighting facility
High-illuminance leading lamp	Leading lamp that uses a cold cathode fluorescent lamp	Lighting facility

Lighting Control Device

Facility/System Technology	Details	Objectives and measurers part
Blind control	Technique to cut of air conditioning load using daylight in accordance with seasons and time zones	Air conditioning facility, hot water supply facility, ventilation facility, elevator/escalator
Automatic lighting-flashing device	Device that flashes lighting automatically based on schedules, daylight sensors, and human sensors	Lighting facility
Stage-dimming system	System that sets lighting in stages in accordance with lighting requirement and avoids excessive illuminance	Lighting facility
Daylight utilization system	System that controls the light automatically for maintaining the room lighting adequately by using a daylight sensor that enables the system to utilize the exterior natural light and to reduce the lighting power	Lighting facility

(5) BEMS

The following facilities are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures regulated in the item “1. Energy Consumption Facilities” of the objectives and measures part of the standards of judgment.

Facility/System Technology	Details	Objectives and measurers part
Energy analysis function	Function that evaluates energy consumption and analyzes the relation between the consumption and interior environment	BEMS
Interior-environment management function	Function that manages the interior environment such as temperatures and humidity	BEMS
Facility operation management function	Function that manages the operations of air conditioners and lighting facilities	BEMS
Energy-load prediction function	Function that performs advanced energy-conservation utilizing heating-load prediction technology	BEMS
Checking function	Function that analyzes the conditions of each facility and equipment and informs circumstances such as readjustment demand	BEMS
Integrated energy-conservation control function	Function that controls air-conditioning facility and electrical facility comprehensively and to minimizes energy-consumption automatically	BEMS

(6) Utilization of Unused Energy

The following facilities are valid for preparing Medium- and Long-term plans as the specified examples of the facilities for achieving the objectives and measures regulated in the item “2. Other matters related to the rational use of energy” of the objectives and measures part of the standards of judgment.

Facility/System/ Technology	Details	Objectives and measurers part
Facility effectively utilizing water pressure	Facility that recovers the potential energy of the water as a part of pump-power pumped by an open-regenerative system using a waterwheel while dropping and recovers the energy to power by using a generator. The available device and facility are power-recovery waterwheel pumping device and small-hydropower generation facility.	Unused energy utilization

Temperature-difference energy utilization system	System that recovers the temperature-difference energy among sewage, river water, and ground water near workplaces and intermediate water-supply systems in the workplaces by using heat pumps and utilizes the energy for air conditioning and hot water supply.	Unused energy utilization
--	---	---------------------------

Remark

It is recommended that the Type 1 Designated Business Operator (excluding water supply industry, sewer industry, and waste processing industry) refer to the facilities of the water supply industry regulated in the “Guidelines for preparing Medium- and Long-term plans by the water supply industry, sewer industry, and waste processing industry in the Type 1 Designated Business Operator (Article 1 of the notice announced by the Ministry of Health, Labour and Welfare, Ministry of Economy, Trade and Industry, Ministry of Land, Infrastructure and Transport, and Ministry of the Environment)” for its intermediate water supply system in the factories or work places that recycles residential drainage and rainwater in a processing plant and utilizes the water for washing lavatory bowls and for supplying supplementary water to a cooling tower and refer to the facilities of human waste of the sewer industry and waste processing industry regulated in the “Guidelines for preparing Medium- and Long-term plans by the water supply industry, sewer industry, and waste processing industry in the Type 1 Designated Business Operator” for its septic tank facility that treats a water pursuant to the standards for drainage while discharging to the facilities and system other than a public sewer and the harm-eliminating facility for a kitchen drainage, that eliminates the possible drainage obstructing the processing function of public sewers and damaging all types of sewers.