JFM

JFM Green Bond Impact Report 2025

International Bond

JFM

Message from CEO

Japan Finance Organization for Municipalities
President and CEO
NAITO Hisashi

Japan Finance Organization for Municipalities (JFM) was established under the law as a joint funding organization wholly owned by all Japanese local governments and has provided long-term and low-interest-rate loans to the local governments. JFM supports the local governments' financing in the capital markets and contributes to their sound financial management, the welfare of their residents, and the sustainable development of local communities.

Local governments, amidst a decrease in population, are facing various administrative demand, such as the revitalization of regions, measures against the declining birth rate and an aging population, deteriorating infrastructure, measures against large-scale and intensifying natural disasters.

To address these challenges, JFM provides loans to local governments that develop infrastructure and administrative services to their residents, and contributes to sustainable development of the community and environment.

JFM examines and conducts research & studies on sustainability-related initiatives at the Sustainability Working Group, which has been established under the Sustainability Committee, chaired by the President and CEO.

In its sustainability initiatives, JFM formulated a Green Bond framework in January 2020 and has been issuing Green Bonds annually in international capital markets to finance sewerage projects.

Sewerage projects, which covers the largest portion of JFM's loan portfolio, is managed by local governments, and the quality of water is regulated under the laws of Japan. Sewerage plays an important role to improve living conditions, prevent floods and preserve water quality through wastewater treatment and rain water drainage. The Japanese government and the local governments are working to promote sewerage systems while addressing aging facilities and minimizing the impact of natural disasters to establish a sustainable sewerage system.

JFM contributes to the realization of sustainable local communities by providing loans to these sewerage projects promoted by the local governments.

In this report, JFM summarizes environmental impacts of the local governments' sewerage projects financed by JFM's 6th International Green Bond, which was issued in January 2025. The objective of this report is to actively disclose to investors the Japanese local governments' efforts on initiative related SDGs and the environmental impact of each project.

JFM hopes this report will help deepen investors' understanding of JFM Green Bonds.

地方公共団体金融機構
Japan Finance Organization for Municipalities

Executive Summary

- On the back of the growing global concerns on SDGs, JFM issued EUR 500 million (approx. JPY 81.4 billion) Green Bond in January 2025, with the proceeds allocated to local governments' sewerage projects, in order to promote actively the local governments' SDGs initiatives as well as secure stable provision of long-term, low-interest financing.
- JFM Green Bond Framework is aligned with the four core components (Use of Proceeds, Process for Project Evaluation and Selection, Management of Proceeds, and Reporting) of the International Capital Market Association (ICMA)'s Green Bond Principles (GBP) 2021 and the Japan Ministry of Environment's Green Bond Guidelines 2022.
- JFM's Green Bond has received a second-party opinion from Moody's and has attained an SQS2 sustainability score (second-highest rating "very good" out of five-grade evaluation).

Summary of Terms – Green Bond

Series	Series 107 Japan Finance Organization for Municipalities Bonds (International)
Tenor	5 year
Issue Amount	EUR 500 mm
Pricing Date	8 January 2025
Issue Date	16 January 2025
Maturity Date	16 January 2030
Coupon	2.750%
Bond Ratings	A1 / A+ (Moody's / S&P)
Second-party Opinion Provider	Moody's
Sustainability Quality Score	SQS2 (Very good)

Summary of Eligible Projects and Impacts (Details on p.5 and p.6)

- JFM has conducted surveys to relevant local government borrowers in order to measure the environmental impacts of their Green Bond eligible sewerage projects for the loans disbursed between 16 January and 31 March, 2025. The breakdown of loan amount by project type is shown below.

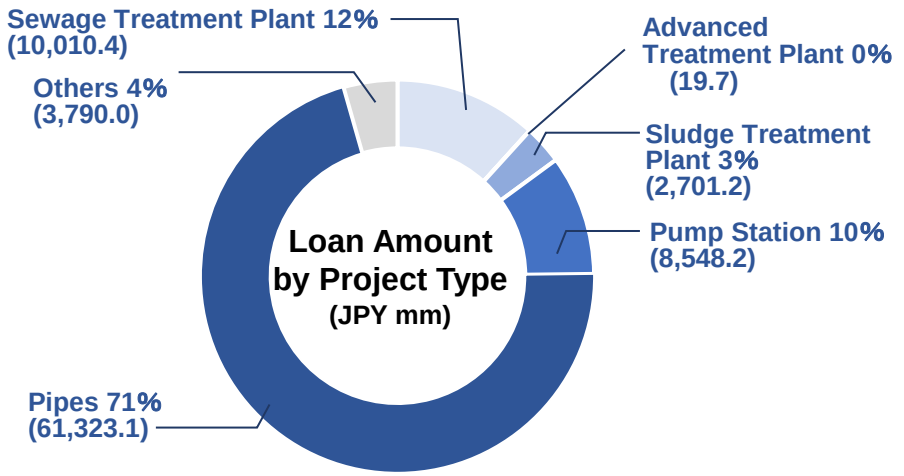
The refinancing rate for the sewerage projects was 0%.

Population of the covered area
16,083,013 persons

Annual amount of electricity saved
5,969,822 kWh

Annual water management capacity
2,822,150,791 ㎥

Total extension of new / renewed pipes
330,939 m
Annual volume of treated water to be increased by the new installation of pipes
60,463,489 ㎥



Additional Environmental Impacts

Sludge recycling
- Reuse as fertilizer and raw material for cement
- Use of digestion gas as fuel

Replacement of mechanical and electrical equipment with energy-saving equipment resulting in a reduction of power consumption

Sewerage Projects

Role of Sewerage

In Japan, sewerage projects contribute to the improvement of public health and the preservation of living environment and public water quality, playing an important environmental and societal role.

The government has formulated the “Priority Plan for Social Infrastructure Development” for the development of roads and rivers to address issues related to sewerage projects by eliminating areas with limited sewerage coverage, reducing environmental burden through the effective utilization of sewerage sludge, and taking other actions. Under this plan, local governments establish their plans such as “Project Plans” and aim to achieve systematic improvement and maintenance of facilities, ensuring the sustainable functionality of sewerage systems.

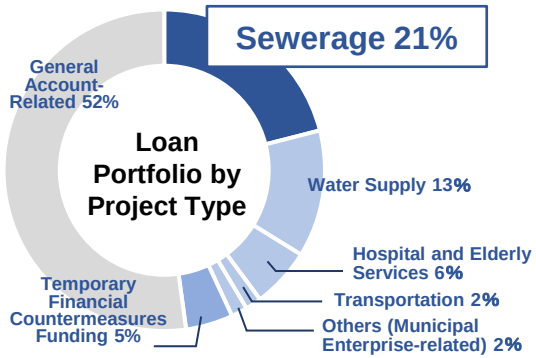
As of the end of FY2024, the sewerage treatment coverage rate in Japan was 93.7%. The total length of installed pipes reached approximately 500,000 km (310,000 miles) as of the end of FY2023 and the number of sewerage treatment plants was approximately 2,200 as of the end of FY2022*1.

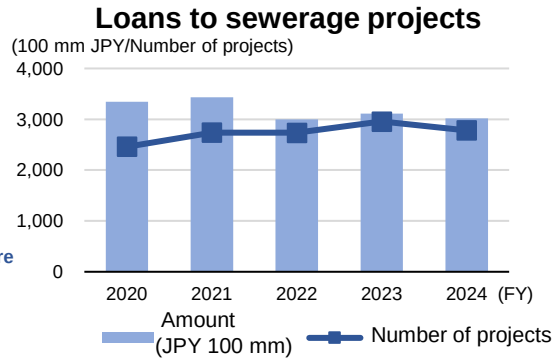
However, many sewerage pipes and treatment facilities have deteriorated, and it is expected that there will be an increasing demand for renewal and reconstruction of sewerage-related facilities in the future. In addition, Japan has seen a rise in natural disasters such as typhoons and earthquakes in recent years, leading to an increased need to protect and upgrade lifeline sewerage facilities to minimize the impact of such natural disasters.

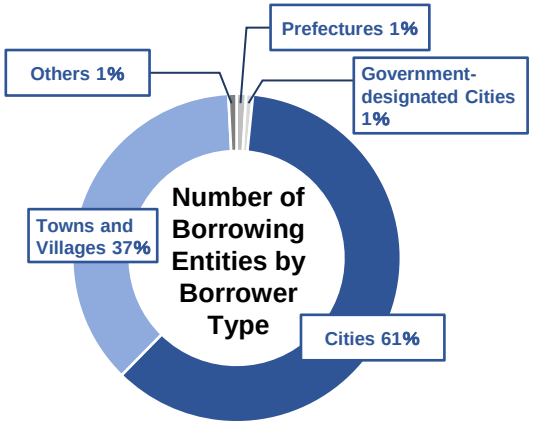
*1 Ministry of Land, Infrastructure, Transport and Tourism.

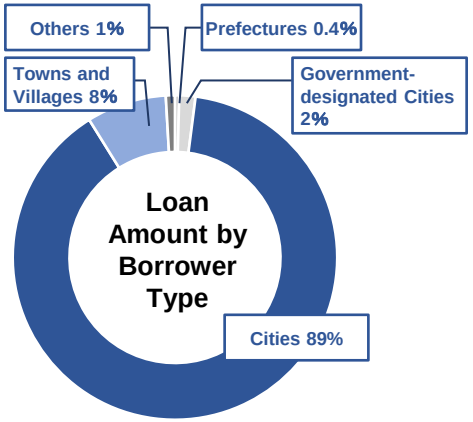
Matsuo Purification Center (Iida City, Nagano Prefecture)

Amount of Loans to Sewerage Projects









※Due to rounding, the total of the chart’s composition ratios may not add up to 100.

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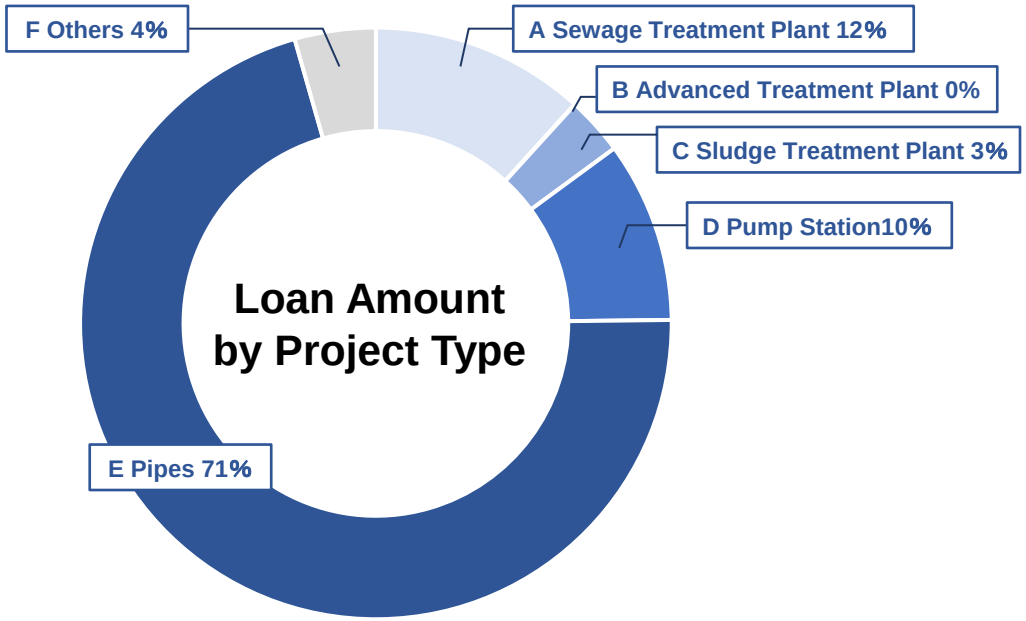
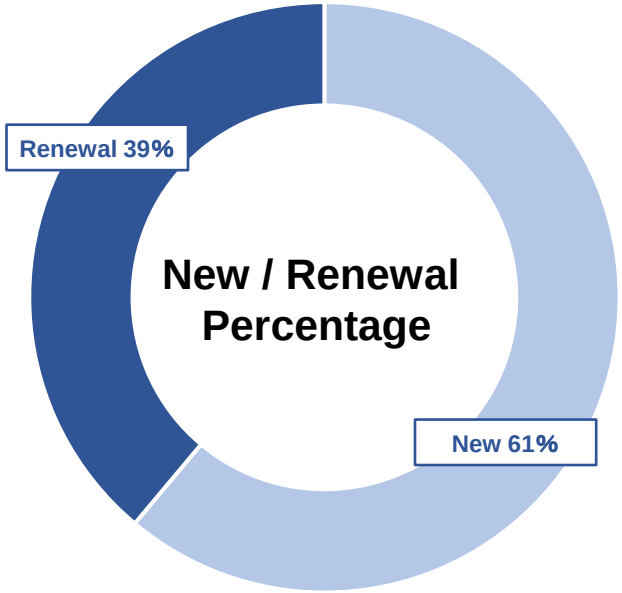
	Prefectures	Government-designated Cities	Cities	Towns and Villages	Others	Total
Number of Borrowing Entities	7	5	458	276	6	752
Number of Loans	12	8	1,847	660	17	2,544
Loan Amount (JPY mm)	1,086.3	4,160.8	229,726.9	20,518.8	2,338.0	257,830.8

- Sewerage projects account for a large portion of JFM's loan to local governments, totaling JPY 300 billion – 400 billion each year.
- The total loan amount to sewerage projects for FY2024 (1 April 2024 to 31 March 2025) (excluding refinancing) was approx. JPY 257.8 billion.
  The number of borrowing entities was 752, and the number of loans was 2,544. In terms of borrower type, cities was the largest category with 458 entities (61%), followed by towns and villages with 276 entities (37%). Cities accounted for 89% of the total loan amount.

Green Bond Eligible Projects

- JFM Sustainability Working Group conducted a survey for the purpose of this Green Bond reporting, targeting 84 local governments which JFM financed JPY 300 million or more each for eligible projects between 16 January 2025 and 31 March 2025. The working group obtained effective response from 73 local governments representing a total of approx. JPY 86.3 billion in loan amount (effective response rate: 87%). The refinancing rate was 0%, as the survey covered only new loans for sewerage projects excluding refinancing.
- Regarding the loan amount eligible for Green Bond by project type, pipes accounted for the largest portion with 71%, followed by sewage treatment plants with 12% and pump stations with 10%.
  Of the total amount, 61% was allocated to new facilities and 39% to renewal projects.





		Number of Projects	Loan Amount (JPY mm)
A	Sewage Treatment Plant	87	10,010.4
B	Advanced Treatment Plant	2	19.7
C	Sludge Treatment Plant	19	2,701.2
D	Pump Station	78	8,548.2
E	Pipes	170	61,323.1
F	Others	23	3,790.0
	Total	379	86,392.6

	Number of Projects	Loan Amount (JPY mm)
New	136	52,681.0
Renewal	243	33,711.6
Total	379	86,392.6

Environmental Impacts of the Eligible Projects

- Population (users of the sewerage system) of the treated areas for the Green Bond eligible projects totaled 16,083,013, and 2,822,150,791 ㎥ of water was treated in the year.
- The eligible projects helped reduce a total of 5,969,822 kWh of annual electricity consumption (actual, planned, or estimated values).
- A total of 330,939 m of pipes were newly constructed or renewed and the new construction increased the volume of treated water by 60,463,489 ㎥.
- As other environmental improvement effects, projects for new construction and renewal of pipes contributed to preserving public water quality and preventing floods in the event of natural disasters. A respondent said “Use of gravity flow enables to eliminate pump stations, which is expected to reduce electricity consumption and CO_2 emissions”. Some of the local governments are recycling sludge generated in the sewage treatment process. As effective use of the resources, they “reuse sludge as fertilizer and raw material for cement,” “convert sludge into solid fuel,” and “generate electricity using digestion gas discharged in the treatment process as fuel”.

Population of the covered area
16,083,013 persons

Annual water management capacity
2,822,150,791 ㎥

Annual amount of electricity saved
5,969,822 kWh

Total extension of new / renewed pipes
330,939 m

Annual volume of treated water to be increased by the new installation of pipes
60,463,489 ㎥

※Summary of Methodology

1) Covered area's population…Calculated by totaling the population of the eligible projects' covered areas
2) Annual water management capacity…Calculated by totaling the annual volume of treated water in the eligible project areas
3) Annual amount of electricity saved…Calculated by totaling the annual electricity savings (actual, planned, or estimated values) of the eligible facilities and equipment
4) Total extension of new / renewed pipes…Calculated by totaling the length of pipes newly constructed or renewed
5) Annual volume of treated water to be increased by the new installation of pipes…Calculated by totaling increased water management capacity (actual, planned, or estimated values) after new construction or renewal / reconstruction of pipes

Other environmental impacts reported by surveyed local governments

Impacts brought by new construction / renewal of pipes

- Prevention of underground pollution by sewage discharged in the event of natural disasters and prevention of flooding by rainwater (Hakodate City, Kure City, etc.)
- Preservation of public water quality, improvement of living conditions (Tsuruoka City)
- Reduction of treatment plants' processing load by preventing unknown water*1 from flowing into pipes (Hakodate City)

*1 Rainwater, ground water, and other waters that flow into sewer pipes

Impacts brought by renewal of machinery / equipment

- Introduction of high-efficiency, energy-saving equipment to reduce power consumption and CO_2 emissions (Sano City, Marugame City, etc.)
- Renewal of sludge dehydrators to reduce the moisture content and sludge incineration volume, and to reduce electricity consumption at incinerators (Sasebo City)

Sludge recycling

- Reuse as fertilizer and raw material for cement (Kofu City, Matsumoto City, etc.)
- Conversion into solid fuel to use as auxiliary fuel at waste incineration plants (Toyama City)
- Use of digestion gas generated from sewage sludge as fuel (Use digestion gas-sourced electricity at treatment plants) (Sendai City, Funabashi City, etc.)

Case Study I: Tsuruoka City Public Sewerage Sludge Recycling (Composting) Project

Tsuruoka City sludge treatment facility image

Project Overview (Project period: FY2023 - FY2026 (plan))

Total project cost (FY2024) : JPY 555.45 million, of which JFM funds : JPY 258.50 million

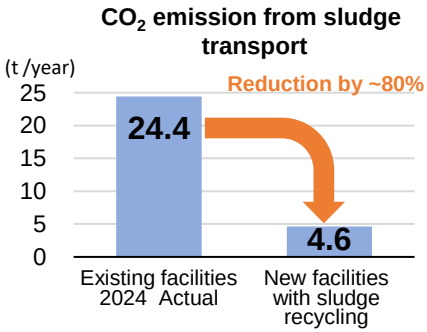
- Since Tsuruoka Compost Center started operation in 1986, the city has been producing compost from sludge generated at Tsuruoka Purification Center for about 40 years.
- Currently, since Tsuruoka Compost Center operates by limiting the production volume to about 550t per year, which is about one-third of the production capacity, due to the aging of facility, the city is facing the issues of increasing volume of sludge disposed at private industrial waste disposal companies, rising disposal costs and disposal sites to be secured.

- By constructing a sludge recycling (composting) facility in the site of Tsuruoka Purification Center, the volume of composted sludge and produced compost will increase threefold. Additionally, by treating sludge within the site, CO_2 emissions during sludge transport will decrease and sludge disposal costs will decline, which enables a stable treatment system.

Highlights — Positive regional impact from the development of the sludge recycling (composting) facility

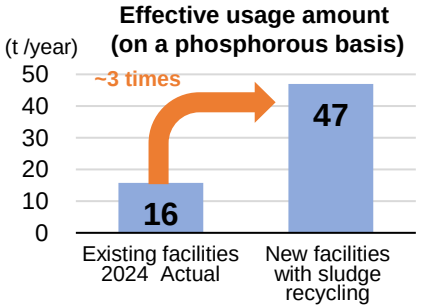
Contribution to a decarbonized society

- Reduction of the use of chemical fertilizers, which reduces CO_2 emission from the production/transport of such fertilizers, reduction of CO_2 emission from transport of sludge.
- Storage of carbon in the ground like other organic fertilizers



Contribution to regional agriculture

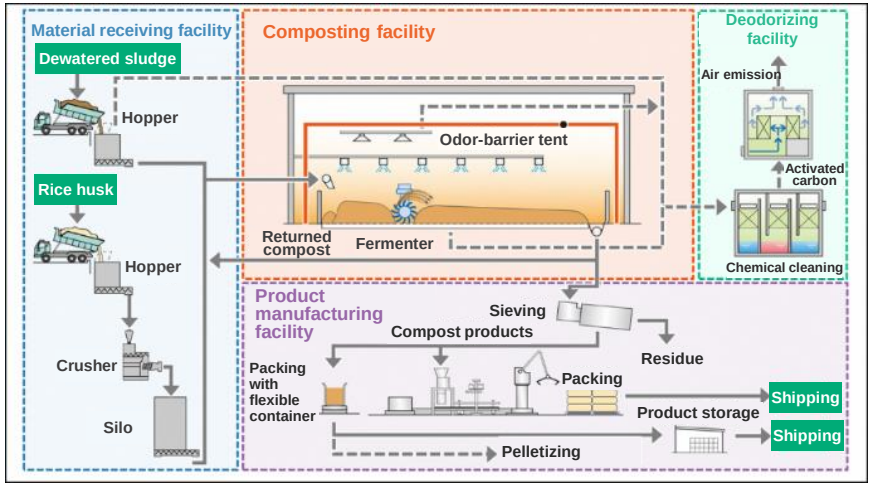
- Volume of effectively utilized regional resources (on a phosphorus basis): 47t / year
- Utilization of compost as circular fertilizer in the region, contributing to the promotion of agriculture



Project impact and cost effectiveness

- Expected cost reduction of about JPY 37 million per year by reducing sludge disposal costs to be paid to private industrial waste disposal companies and maintenance costs and by increasing sales of compost products

Flow of sludge composting



- Mix sludge and rice husk, a subsidiary material, for aerobic fermentation
  ⇒ **Ensuring the same quality as current products**
- Facility structure: material receiving facility, composting facility, deodorizing facility, production facility, power receiving/transformation facility, utility facility
  ⇒ **Thorough measures to prevent odors, considering surrounding facilities**

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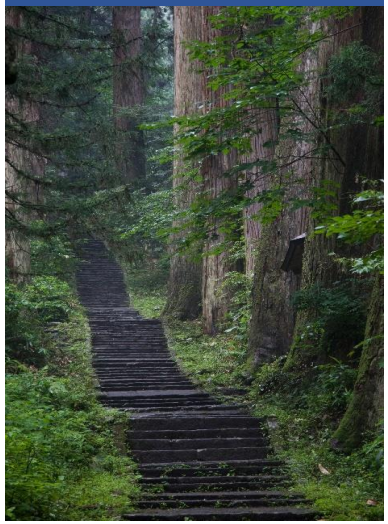
<Reference> Tsuruoka City, Yamagata

Stone steps to Mt. Haguro (Dewa Sanzan)



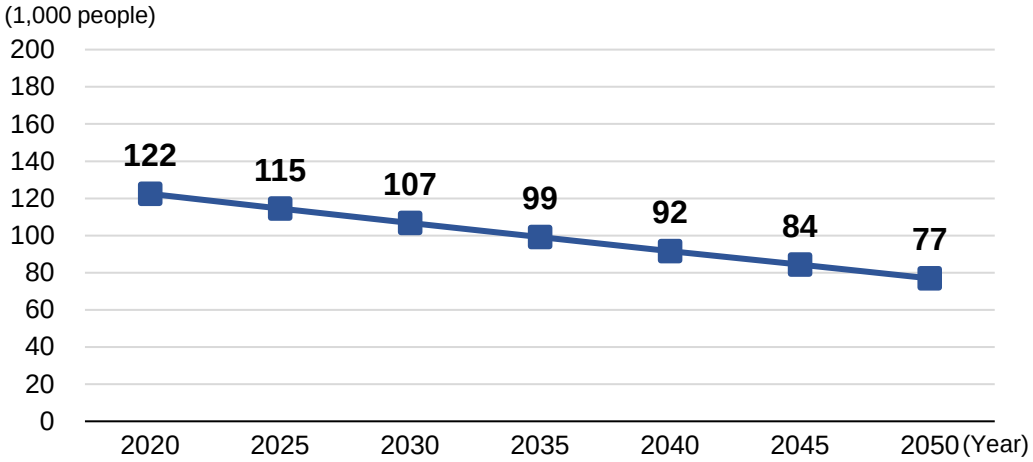
Overview

- Tsuruoka City in Yamagata Prefecture is the largest city in Tohoku blessed with diversified and abundant nature, holding various tangible and intangible local resources, including: the designation as UNESCO Creative City of Gastronomy; three Japan Heritages of “Dewa Sanzan,” “Samurai Silk” and “Port of Call for Kitamae-bune” four national hot spring resorts; the agriculture industry with two Yamagata rice brands “Tsuyahime” and Yukiwakamaru” and the indigenous crops such as dadacha beans bringing rich harvest; and the accumulation of the world’s leading bio-research and other higher educational research institutes and venture companies.
- Tsuruoka City started its public sewerage projects in 1972. As of the end of FY2024, the city has a sewerage coverage rate of 96.1% (including the public sewerage, community drainage systems and septic tanks) and has built 30 purification centers. The city has been working on the development of “BISTRO Sewerage System” since 2013 through a joint research team consisting of 7 researchers from industry, academia and government and a pilot project for cultivating rice for animal feed by using treated water irrigation through a joint research with Yamagata University.
- The city is highly evaluated with these efforts and received ”the Ministry of Land, Infrastructure, Transport and Tourism Deputy Minister for Water Supply and Sewerage’s Award” in the “2024 Domestic Fertilizer Resource Utilization Expansion Awards.”

DATA

Population	122,347 (as of 1 October, 2020)
Area	1,311.51㎢ (as of 1 October, 2022)
Sewerage Coverage	96.1% (as of 31 March, 2025)
City Budget	JPY 80.77 billion (FY2025 General Account Initial Budget)

Demographic Trend



*Source: National Institute of Population and Social Security Research, Regional Population Projections for Japan (2023)

Matsugaoka Silk Farms (Samurai Silk)

Kamo Aquarium (Jellyfish Theater)

Case Study II: Hayama Town Purification Center Development & Operation Projects

Hayama Purification Center (exterior)

Sewerage system utilizing tunnels (water treatment facility)

Project Overview (Project period: FY2023 - FY2024)

Total project cost (FY2024): JPY 944 million, of which JFM funds: JPY 379 million

- Hayama Town needed to increase capacity of its purification center and relay pump station to eliminate uncovered areas.
- With many projects for installation, expansion and measures against aging facilities, expenses were expected to nearly double compared to recent years, necessitating investment cost reduction.
- Maintenance & management tasks were based on specifications, involving cumbersome public office procedure and leaving no room for private sector's originality, hindering quick and effective operations.

- The town ordered the development projects -- building the 4th train mechanical electric equipment in the purification center and adding a sewage pump at the relay pump station, and renovating the aging central monitoring facility which centrally monitors the purification center and relay pump station -- in the 【design-build (DB) method】, succeeding in reducing construction costs.
- The operation projects are comprehensively outsourced to the private sector, which leads to more efficient and effective operation and helps reduce maintenance / management costs. Facilities are operated and managed based on the private sector knowhow, realizing energy saving / decarbonization.

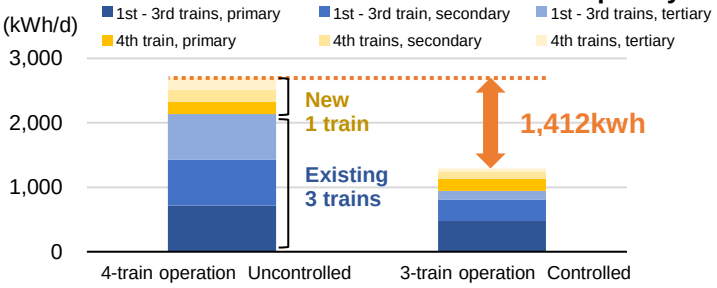
Highlights Environmental impacts expected from the Hayama Purification Center development & operation projects

(1) Optimization of the surface aerator rotation frequency and treatment operation trains

- Installed a 4th surface aerator that is able to control the aerator blade rotation frequency.
- Two of the three existing trains and the 4th aerator are operated in combination, depending on the water quality condition.

- The combined operation of the three trains helps save electricity consumption by **1,412kWh** per day compared to the operation of all the four trains. Power saving of as much as **525,000kWh** and CO_2 emissions reduction of as much as **237,300kg** are expected every year.

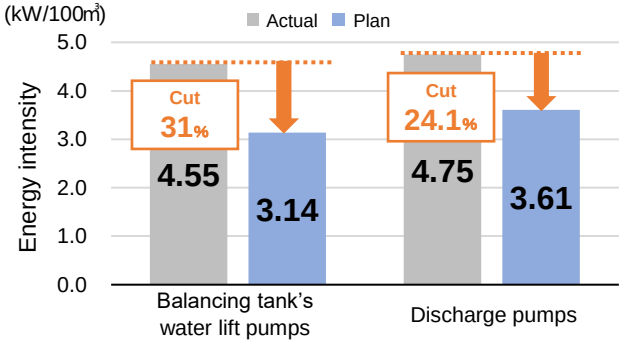
Electricitytrainssumption: 4 trains vs 3 trains + controlled rotation frequency



(2) Optimization of method to control balancing tank's water lift pumps and discharge pumps

- Setting of the pump start water level for balancing tank's water lift pumps and discharge pumps was changed to +2m and +3m, respectively.

- With the higher water level, high hydraulic pressure in the tank helps extrude water, saving pump operating time.
  Power saving of as much as **60,343kWh** and CO_2 emissions reduction of around **27,275kg** are expected every year.



(3) Reduction of CO_2 emissions by introducing electric monitoring vehicles

- Introduced two EVs, leading to CO_2 emissions reduction.

- The vehicles, with estimated annual travel distance of 2,400km per unit, are expected to help reduce CO_2 by **412kg** every year.

The projects (1), (2) and (3) are expected to reduce **CO_2 emissions** by **264,987kg** per year

<Reference> Hayama Town, Kanagawa

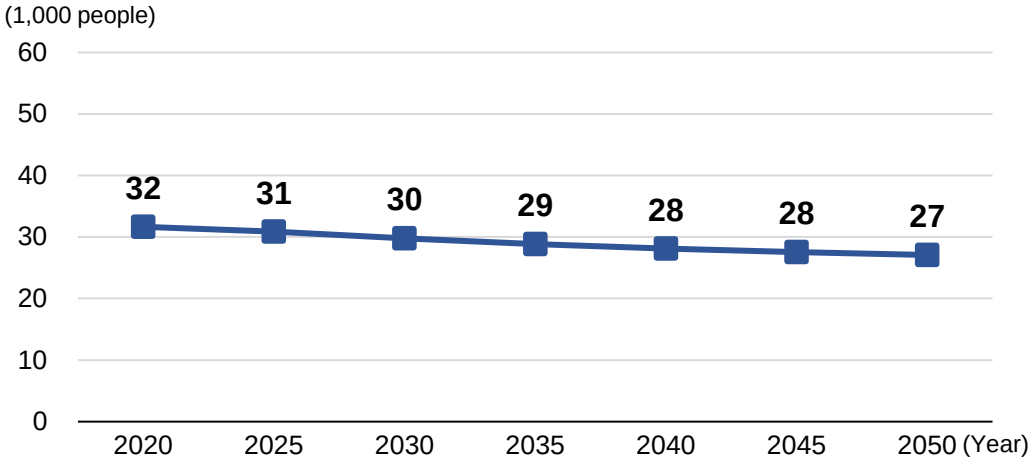
Overview

- Hayama Town, Kanagawa Prefecture is located in central-western part of the Miura Peninsula, 50 kilometers south of Tokyo, and is bordered on the north by Zushi City and on the northeast-south by Yokosuka City. With a 4-kilometer coastline facing Sagami Bay on the west, Hayama is a picturesque place offering a scenic distant view of Mt. Fuji and Hakone.
- In 1912, escort members of Keio's swimming club sailed on a yacht off the coast of Morito. This is regarded as the start of the modern yacht activities in Japan (source: The History of Hayama Town, published in 2015). There is a stone monument at the entrance of Hayama Port engraved with the words "Birthplace of Yacht Activities in Japan," and yacht races participated by nearly 50 universities are held in waters off Hayama.
- As a unique point of its public sewerage, Hayama Town selected mountain areas as the location for the projects, out of consideration to the town's historic background, location of the Hayama Imperial Villa, venue for Emperor Showa's biology research, and the local fishing industry. Most of the sewage treatment facilities were built underground, including an unusual sewerage system utilizing tunnels, so as to minimize landscape impact.

DATA

Population	31,665 (as of 1 October, 2020)
Area	17.04㎢ (as of 1 July, 2023)
Sewerage Coverage	76.7% (as of 31 March, 2025)
Town Budget	JPY 13.3 billion (FY2025 General Account Budget)

Demographic Trend



*Source: National Institute of Population and Social Security Research, Regional Population Projections for Japan (2023)

Birthplace of yacht activities in Japan

Manhole card

Eligible Projects

Reporting Items

- Eligible area
  (treatment area, drainage area, project area, the entire city, etc.)
- Population of the covered area (persons)
- Annual water management capacity (m^3)
- Project information
  (Facility type, New/renewal category, Project description, Total project cost (JPY1,000), JFM loan amount (JPY1,000),
  JFM loan amount / total project cost (%))
- Total extension of new/renewed pipes (m)
- Annual volume of treated water to be increased by the new installation of pipes (m^3)
- Water quality
  (biochemical oxygen demand (BOD) (after treatment, mg/L), phosphorus (after treatment, mg/L))
- Other positive environmental impact
  (amount of electricity saved (kWh), reduction of CO_2 emissions (t-CO_2), sludge recycling rate (%),
  effective use of sewer sludge (usage and description), use of heat generated from sludge incineration, etc.)

Facility Type of Eligible Projects

A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

*Eligible areas are described differently such as by treatment area or by project area, depending on the method of project management and the method of calculating each metric adopted by each borrowing entity

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Hakodate City	South Treatment Area	115,379	20,665,753	A	Renewal	Renovation of central monitoring systems, etc. at Nambu Sewage Terminal Treatment Plant	872,955	600,400	68.8			N/A	N/A	**New Installation of rainwater pipes** ・Prevention of inundation and flooding in residential areas, etc. **Renovation of pipes** ・Prevention of underground pollution caused by sewage outflow in the event of earthquakes and other natural disasters ・Reduction of the load on treatment plants by reducing the amount of rainwater and groundwater flowing into pipes
				A	Renewal	Consignment of implementation design of drainage canal outflow gates at Nambu Sewage Terminal Treatment Plant	9,570	9,400	98.2			N/A	N/A	
				D	Renewal	Renovation of No.1 rainwater pump at Sumiyoshi Pumps Station	23,870	23,800	99.7					
				D	Renewal	Renovation of remote monitoring systems at Nambu Sewage Terminal Treatment Plant, pump stations and pump facilities in the city	160,165	93,600	58.4					
				E	New	New installation of rainwater pipes	130,669	125,300	95.9	N/A	N/A			
				E	Renewal	Renovation of sewerage pipes	406,406	404,000	99.4	N/A				
	Hakodate Bay Treatment Area	98,006	16,079,967	A	Renewal	Contribution for a regional sewerage project at Hakodate Bay (renovation of Hakodate Bay Regional Purification Center)	124,865	122,100	97.8			N/A	N/A	
				E	New	New installation of sewerage pipes	41,998	39,900	95.0	331	116,683			
				E	New	New installation of rainwater pipes	106,711	54,400	51.0	N/A	N/A			
				E	Renewal	Renovation of sewerage pipes	17,875	17,800	99.6	N/A				
				E	Renewal	Renovation of rainwater pipes	158,105	93,400	59.1	N/A				
Muroran City	Muroran Treatment Area	73,486	12,171,620	A	Renewal	Renovation of conduit pipes and primary sedimentation tank facilities at Ranto Sewage Treatment Plant	140,684	62,782	44.6			N/A	N/A	
				D	Renewal	Renovation of rainwater pump facilities at Nakajima Sewage Pump Station	754,430	375,700	49.8					
				D	Renewal	Renovation of pump facilities at Misaki Sewage Relay Pump Station	25,300	20,999	83.0					
				E	Renewal	Upgrading and renovation of sewerage pipes	241,649	163,119	67.5	N/A				

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Kushiro City	Furukawa Treatment Area	89,291	17,277,710	A	Renewal	Renewal of sewage pumps at Furukawa Terminal Treatment Plant	141,933	141,933	100			N/A	N/A	
				D	Renewal	Renewal of remote monitoring systems at Okawa / Minamihama Pump Station	89,028	44,514	50.0					
				D	Renewal	Renewal of substations and low-voltage power facilities at Harutori Pump Station	4,612	4,612	100					
	Shirakaba Treatment Area	13,458	1,577,710	A	Renewal	Seismic retrofitting of reaction tank joints at Shirakaba Terminal Treatment Plant	978	489	50.0			N/A	N/A	
				A	Renewal	Renewal of rooftop waterproofing equipment in water treatment buildings at Shirakaba Terminal Treatment Plant	27,757	15,634	56.3			N/A	N/A	
	Otanoshike Treatment Area	43,610	4,717,160	A	Renewal	Renewal of water treatment facilities at Otanoshike Terminal Treatment Plant	183,180	82,431	45.0			N/A	N/A	**Renewal of water treatment facilities at Otanoshike Terminal Treatment Plant** ・Annual amount of electricity saved 162,000kWh (estimate)
				A	Renewal	Renewal of hot water boilers at Otanoshike Terminal Treatment Plant	150,700	75,350	50.0			N/A	N/A	
				A	Renewal	Seismic retrofitting of reaction tank joints at Otanoshike Terminal Treatment Plant	6,208	3,104	50.0			N/A	N/A	
				A	Renewal	Seismic retrofitting of the administration building at Otanoshike Terminal Treatment Plant	108,636	55,501	51.1			N/A	N/A	
	Akankohan Treatment Area	1,075	2,628,187	A	Renewal	Renewal of water facilities at Akankohan Terminal Treatment Plant	8,294	4,147	50.0			N/A	N/A	
				A	Renewal	Renewal of private power generation facilities at Akankohan Terminal Treatment Plant	5,258	2,629	50.0			N/A	N/A	
	Onbetsu Treatment Area	1,250	126,050	A	Renewal	Renewal of measuring equipment at Onbetsu Purification Center	21,399	13,871	64.8			N/A	N/A	
Chitose City	Public Sewerage Area	94,949	19,296,178	E	New	New installation of sewerage pipes	669,790	219,200	32.7	N/A	N/A			**Sludge recycling rate:100%** ・Transport to composting companies
				E	Renewal	Renewal of pipes, renewal of machinery equipment at sludge treatment centers	842,578	635,800	75.5	2,939				

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Ebetsu City	Ebetsu Treatment Area	114,863	17,296,398	A	Renewal	Renovation of transformers, storage batteries for DC power supply systems, etc. at Ebetsu City Purification Center	307,420	118,022	38.4			8.1	0	**Sludge recycling rate:100%** ・Transport and spraying of sludge as ordinary fertilizer on farmland ・Use of digestion gas generated in the sewage treatment process as fuel for generators
				D	Renewal	Renovation of gate facilities, etc. at Ebetsubuto Relay Pump Station, etc.	206,312	44,794	21.7					**Renovation of gate facilities, etc. at Ebetsubuto Relay Pump Station, etc.** ・Annual amount of electricity saved 18.1kWh(estimate)
				E	New	New installation of public sewage basins etc.	67,888	52,741	77.7	N/A	N/A			
				E	Renewal	Renovation of sewerage pipes	266,806	180,843	67.8	1,221				
Morioka City	Tonan Treatment Area	252,084	39,911,711	D	Renewal	Seismic retrofitting of Hebishima Sewage Relay Pump Station	4,775	3,800	79.6					
				E	New	New installation of sewerage pipes	562,655	411,800	73.2	5,287	157,555			
				E	New	New installation of rainwater pipes	284,803	179,000	62.9	489	4,932			
				E	Renewal	Rehabilitation of sewerage pipes	380,447	321,400	84.5	N/A				
Kitakami City	Kitakami Industrial Complex Treatment Area	220	2,152,294	A	New	Installation of additional mechanical / electrical equipment and drainage canals at a terminal treatment plant in Kitakami industrial complex	2,505,385	1,416,300	56.5			1.4	less than 0.1	**Sludge recycling rate:100%** ・Transport to composting companies
Sendai City	Minamigamo Treatment Area	757,443	102,827,284	C	New	Maintenance of digestion gas power generation plants at Minamigamo Purification Center	110,000	55,000	50.0					**Maintenance of digestion gas power generation plants at Minamigamo Purification Center** ・Maintenance of sewer sludge digestion gas power generation plants in line with the renovation of sludge treatment plants and implementation of a power generation project using digestion gas generated as fuel by private companies ・Control of greenhouse gas emissions
				E	New	Seismic retrofitting of sewerage pipes	326,601	213,300	65.3	146	N/A			
				E	New	New installation of sewerage pipes	113,012	113,000	99.9	347	N/A			
				F	New	Maintenance of retention basins	1,251,120	625,600	50.0					

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Sendai City	Miyagi Treatment Area	56,926	6,116,036	D	Renewal	Renovation of electrical equipment at Akasaka Pump Station	53,149	26,600	50.0					Renewal of mechanical and electrical equipment ・Contributing to energy-saving effect
				D	Renewal	Renovation of crushers, etc. at Akasaka Pump Station	40,845	20,400	49.9					
				D	Renewal	Renovation of sewage equalization tanks at Miyagidai Pump Station	45,349	45,300	99.9					
Odate City	Odate Treatment Area	41,560	3,020,403	A	Renewal	Contribution for the renewal of facilities in regional sewerage treatment plants	82,950	44,600	53.8			N/A	N/A	
				E	New	New installation of sewerage pipes	769,922	398,300	51.7	5,627	42,836			
				F	New	Maintenance of pretreatment plants for human waste, etc.	628,089	318,200	50.7					
Akita City	Waterfront Treatment Area / Taiheizan Treatment Area	279,916	33,883,545	A	Renewal	Renewal of treatment plants at Nibetsu Purification Center	9,350	9,316	99.6			N/A	N/A	
				D	New	Flood control at Furukawa Rainwater Drainage Pump Station	283,783	128,551	45.3					
				D	Renewal	Renewal of Kawaguchi Sewage Relay Pump Station	538,371	255,071	47.4					
				E	New	Installation of sewerage pipes, etc. in uncovered areas	873,855	578,494	66.2	3,426	318,379			
				E	New	Flood control for sewerage pipes, etc.	936,558	509,325	54.4	738	N/A			
				E	Renewal	Renewal of sewerage pipes, etc.	863,860	667,343	77.3	3,482				

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JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Tsuruoka City	**Tsuruoka Treatment Area, etc.**	85,760	11,950,075	A	Renewal	Renewal and seismic retrofitting of treatment plants at Tsuruoka Purification Center, etc.	228,632	110,700	48.4			N/A	N/A	**Construction of sludge recycling (composting) facilities**[*1] ・Annual amount of electricity saved 180,857kWh(estimate) **Sludge recycling rate:90%** ・To be sold as sewer sludge fertilizer at JA Tsuruoka, local DIY stores, etc. in the city **New installation of rainwater pipes** ・Prevention of flood damage **Installation and renewal of pipes** ・Securing of water quality in public waters, and improvement of living environment
				C	New	Construction of sludge recycling (composting) facilities	384,510	173,000	45.0					
				E	New	New installation of rainwater pipes	267,639	143,100	53.5	479	N/A			
				E	New	New installation of sewerage pipes	57,545	49,400	85.8	45	642			
				E	Renewal	Renewal of sewerage pipes	5,578	5,400	96.8	N/A				
Iwaki City	**Northern / Central / Southern Treatment Areas**	165,685	23,760,067	A	Renewal	Seismic retrofitting of the administration building at Nambu Purification Center	411,370	183,000	44.5			N/A	N/A	**Construction of facilities to convert sludge into solid fuel at Chubu Purification Center** ・Annual amount of electricity saved 4,625,574kWh(estimate) **Sludge Recycling Rate: 100%** **Energy Recovery from Sludge** ・Implementation of biogas power generation ・Utilization of thermal energy recovered from hot water in power generation equipment cooling systems for heating anaerobic digesters ・Conversion of dried fuel produced at the solid fuel production facility into thermal energy for use within the plant ・Reuse of sludge incineration ash as recycled roadbed material and recycled sand
				A	Renewal	Renovation of instrumentation equipment at Nambu Purification Center	120,886	54,000	44.7			N/A	N/A	
				C	New	Construction of facilities to convert sludge into solid fuel at Chubu Purification Center	2,199,446	943,800	42.9					
				D	Renewal	Renovation of mechanical equipment for settling basins at Onagawa Pump Station	291,541	131,800	45.2					
				D	Renewal	Renovation of mechanical and electrical equipment for rainwater pumps at Shinmachimae Pump Station	178,926	89,600	50.1					
				D	Renewal	Maintenance of rainwater pumps at Tobu Pump Station	126,583	109,700	86.7					
				D	Renewal	Renovation of mechanical equipment for rainwater pumps at Kitame Pump Station	67,100	63,700	94.9					
				E	Renewal	Renovation of sewerage pipes installed in Benbetsu No.1 Trunk Line	352,751	207,700	58.9	N/A				

*1 Please see Case Study for details

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Mito City	Mitokita Treatment Area, etc.	216,072	20,459,393	A	Renewal	Renovation of electrical equipment at Mito City Purification Center	321,900	158,900	49.4			4.6	0.83	**Sludge recycling rate: 64.9%** ・Transport of sludge incineration ash to cement plants **Renewal of mechanical and electrical equipment** ・Contributing to energy saving effects by upgrading to energy-saving equipment
				E	New	New installation of sewerage pipes	1,440,900	1,374,800	95.4	10,225	N/A			
				E	Renewal	Renovation of sewerage pipes	58,000	52,100	89.8	N/A				
	Hirasu Area, etc.	8,754	964,975	A	Renewal	Renovation of treatment plants	22,900	22,900	100			N/A	N/A	
				E	Renewal	Renovation of relay pumps	4,900	4,900	100	N/A				
Hitachinaka City	South Treatment Area, Nakakuji Treatment Area	102,026	13,042,979	A	Renewal	Renovation and seismic retrofitting of facilities at Hitachinaka City Sewer Purification Center	635,056	268,600	42.3			1.4	2.65	**Renovation of facilities at Hitachinaka City Sewer Purification Center** ・Annual amount of electricity saved 19,972kWh (actual)
				A	Renewal	Contribution for the renovation of facilities at Nakakuji Purification Center	68,855	58,600	85.1			N/A	N/A	
				E	New	New installation of sewer pipes	2,047,884	1,242,100	60.7	3,758	76,898			
				F	New	Maintenance on public basins	2,242	1,000	44.6					
Toride Sewage Works Authority	Jone Treatment Area	95,608	9,857,877	D	New	Installation of additional mechanical and electrical equipment at Yumemino Pump Station	95,564	43,004	45.0					**Installation of additional mechanical and electrical equipment at Yumemino Pump Station** ・Securing of water quality in public waters with increased inflows
				E	New	New installation of sewerage pipes	817,512	515,400	63.0	2,546	43,406			
				E	Renewal	Renovation of sewerage pipes	897,671	435,545	48.5	1,039				
Sano City	All areas of Sano City	80,209	17,124,284	A	Renewal	Renovation of mechanical and electrical equipment at Sano City Water Treatment Center	228,479	49,400	21.6			N/A	N/A	**Renovation of mechanical and electrical equipment at Sano City Water Treatment Center** ・Reduction of CO_2 emissions by introducing energy-efficient equipment
				E	New	Installation of additional sewerage pipes	693,248	382,400	55.2	4,711	182,000			
				E	Renewal	Renovation of sewerage pipes	440,664	201,900	45.8	1,066				

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Takasaki City	Takasaki Treatment Area, etc.	283,505	45,551,273	A	Renewal	Renewal of mechanical and electrical equipment at Harunako Water Quality Control Center	2,002	1,800	89.9			1.4	1.2	
				E	New	New installation of sewerage pipes	1,098,075	741,800	67.6	10,850	92,000			Sludge recycling rate:100% ・Transport to composting companies
				F	New	Contribution for the construction of regional sewerage systems	82,331	82,200	99.8					
Tokorozawa City	Arakawa Right Bank Treatment Area	328,102	36,562,000	E	New	New installation of sewerage pipes	1,603,667	413,000	25.8	4,664	N/A			
				E	Renewal	Seismic retrofitting of sewerage pipes	1,049,386	194,800	18.6	1,828				
				E	Renewal	Renovation of sewerage pipes	633,627	125,300	19.8	1,376				
Toda City	Niizo No.2, No.10 Drainage Areas	N/A	N/A	E	New	New installation of rainwater storage pipes	8,586,000	1,975,000	23.0	920	N/A			New installation of rainwater storage pipes ・Mitigation of flood damage
Yashio City	All areas of Yashio City	70,333	13,651,821	E	New	New installation of sewerage pipes	952,687	552,500	58.0	2,472	368,599			
				F	Renewal	Contribution for the construction of regional sewerage systems (maintenance of sewerage facilities)	48,649	48,600	99.9					
Misato City	All areas of Misato City	126,890	13,497,797	E	New	New installation of sewerage pipes	1,217,976	977,500	80.3	5,883	137,731			
				E	Renewal	Implementation design of the rehabilitation of sewerage pipes	16,230	13,700	84.4	N/A				
Ichikawa City	Edogawa Left Bank Treatment Area	347,800	55,221,945	E	New	New installation of sewerage pipes, and maintenance of pump stations	6,850,120	5,011,300	73.2	13,200	396,938			
	Nishiura Treatment Area	12,400	1,968,810	E	New	New installation of sewerage pipes	142,200	71,100	50.0	300	63,510			

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Chiba City	Imba Treatment Area	383,040	42,467,079	E	Renewal	Seismic retrofitting of sewerage pipes	314,382	197,731	62.9	2,613				
	Central Treatment Area	159,590	17,371,610	A	Renewal	Enhancement of water resistance capabilities of mechanical and electrical equipment at Chuo Purification Center	76,181	34,056	44.7			N/A	N/A	
				A	Renewal	Renovation of primary and terminal sedimentation tanks at Chuo Purification Center	175,124	149,007	85.1			N/A	N/A	
				D	Renewal	Enhancement of water resistance capabilities of mechanical and electrical equipment at Yukino Pump Station	38,708	20,431	52.8					
				E	New	Maintenance of sewerage pipes in Inage No.4 Drainage Area	177,364	40,085	22.6	N/A	N/A			**Maintenance of sewerage pipes** ・Mitigation of flood damage
				E	Renewal	Seismic retrofitting and renovation of sewerage pipes	389,627	152,816	39.2	992				**Maintenance of rainwater infiltration basins** ・Recharge of ground water
	Southern Treatment Area	417,514	58,331,620	A	Renewal	Seismic retrofitting of incinerator buildings at Nambu Purification Center	32,655	16,327	50.0			N/A	N/A	
				D	Renewal	Enhancement of water resistance capabilities of mechanical and electrical equipment at Samukawa Rainwater Pump Station	21,470	10,735	50.0					
				D	Renewal	Seismic retrofitting of incurrent canals and pump wells at Oji Pump Station	19,399	11,669	60.2					
				E	Renewal	Seismic retrofitting and renovation of sewerage pipes	216,281	116,152	53.7	589				
				F	New	Maintenance of rainwater infiltration basins	41,237	27,491	66.7					
Matsudo City	Edogawa Left Bank Treatment Area, etc.	451,931	56,000,000	D	Renewal	Renewal of mechanical and electrical equipment at Koyama Pump Station, etc.	260,457	138,600	53.2					
				E	New	New installation of sewerage pipes	1,561,107	935,500	59.9	8,178	830,000			
Kashiwa City	Nagareyama No.9-4 Treatment Subdivision, etc.	72,933	9,608,490	E	Newl	Installation of additional sewage pipes	397,397	300,177	75.5	874	31,237			
				E	Renewal	Renovation of sewage pipes	275,344	184,844	67.1	905				

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Eligible Projects

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Funabashi City	Takase Treatment Area	271,053	28,040,812	A	Renewal	Renovation of electrical equipment, central monitoring systems and exterior walls at Takase Sewage Treatment Plant	483,204	222,424	46.0			3.91	0.61	**Renovation of Takase Sewage Treatment Plant** ・Annual amount of electricity saved 107,590kWh(actual) **Sludge recycling rate:100%** ・Conversion to cement materials and fertilizers **Conversion of sludge into energy** ・Power generation using digestion gas generated from sewer sludge as fuel **Self-wheeling project** ・Purchase of electricity with zero CO_2 emission factor **Use of small-scale hydroelectric facilities** **Renovation of Nishiura Sewage Treatment Plant** ・Annual amount of electricity saved 154,383kWh(actual) **Sludge recycling rate:100%** ・Conversion to cement materials and fertilizers **Conversion of sludge into energy** ・Power generation using digestion gas generated from sewer sludge as fuel **Project for local production and consumption of electric power** ・Purchase of electricity with lower CO_2 emission coefficient than that of TEPCO **Renovation of sewerage pipes** ・Prevention of cave-in roads by extending the useful life of sewerage pipes
				E	New	New installation of sewerage pipes	313,426	245,534	78.3	346	N/A			
	Nishiura Treatment Area	119,606	21,568,784	A	Renewal	Renovation of the administration building at Nishiura Sewage Treatment Plant	1,483,093	735,875	49.6			0.7	0.81	
				D	Renewal	Renovation of Tosohama Pump Station	38,687	23,687	61.2					
				E	Renewal	Renovation of sewerage pipes	543,128	453,459	83.5	3,038				
	Edogawa Left Bank Treatment Area	33,646	2,268,565	E	New	New installation of sewerage pipes	1,279,191	814,933	63.7	7,117	N/A			
	All areas of Funabashi City	N/A	N/A	E	New	Maintenance of rainwater pipes	454,881	364,760	80.2	735	N/A			
				F	New	Contribution for the construction of regional sewerage systems, and contribution for construction projects in other cities	216,127	216,127	100					
Ichihara City	Kikuma Treatment Area	90,134	9,313,292	E	New	New installation of sewerage pipes	546	520	95.2	N/A	N/A			
				F	New	Pavement restoration work associated with the maintenance of sewerage networks	1,024	970	94.7					

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Eligible Projects

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Ichihara City	Tsukizaki Treatment Area / Asobara Treatment Area	409	52,033	B	Renewal	Renovation of iron solution injection pumps at Tsukizaki Purification Center	1,298	1,280	98.6			1.8	1.3	
						Renovation of iron solution injection pumps at Asobara Purification Center						1.3	1.2	
				D	Renewal	Renovation of emergency alarm systems	7,975	7,600	95.3					
				D	Renewal	Renovation of water level gauges	1,045	1,020	97.6					
	Fukihara Drainage Area	N/A	N/A	D	New	Maintenance of civil engineering structures and incurrent/excurrent canals at Fukihara Pump Station	626,000	352,900	56.4					
	Aobadai Drainage Area	N/A	N/A	F	Renewal	Consignment of design work for the renovation of retention basins	1,671	1,500	89.8					
	Matsugashima Drainage Area	N/A	N/A	F	Renewal	Maintenance of water pipes rerouted during the installation of sewerage networks (rainwater pipes)	7,271	6,910	95.0					
Tachikawa City	Tamagawa Upstream Treatment Area / Kitatama No.2 Treatment Area	179,939	27,531,950	D	Renewal	Renewal of engines for rainwater pumps at Nishikicho Pump Station	2,002	2,000	99.9					
				D	Renewal	Renewal of rainwater pumps at Kashiwacho Sewage Relay Pump Station	412,914	412,900	100					
				E	New	Maintenance of sewerage pipes	27,715	27,700	99.9	159	86,724			
				E	New	Maintenance of rainwater pipes	150,903	70,300	46.6	247	53,138,160			
				E	New	Ancillary work for the maintenance of sewerage pipes	104,468	53,800	51.5	N/A	N/A			
				E	Renewal	Renovation of sewerage pipes	628,978	300,800	47.8	110				
				E	Renewal	Maintenance and renovation of sewerage pipe facilities	42,500	17,400	40.9	N/A				
				F	New	Installation of manholes	280,980	170,800	60.8					

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Hachioji City	Akikawa Treatment Area	306,750	46,037,265	D	Renewal	Maintenance and demolition of rainwater aquifers at Kitano Pump Station	724,514	516,500	71.3					**Rehabilitation of pipes** ・Suppression of increase in the amount of rainwater and groundwater flowing into pipes and the reduction of greenhouse gas emissions by reducing the volume of treated water
				E	Renewal	Rehabilitation of sewerage pipes	154,644	122,600	79.3	1,122				
	Asakawa Treatment Area	134,435	16,680,829	E	Renewal	Rehabilitation of sewerage pipes	228,904	180,600	78.9	1,663				
Chofu City	All areas of Chofu City	239,726	42,251,762	E	New	New installation of pipes under a gravity flow project (demolition of a pump station)	1,087,360	1,069,000	98.3	1,026	707,964			**New installation of pipes under a gravity flow project (demolition of a pump station)** ・Annual amount of electricity saved 96,612.5kWh(estimate) ・Annual amount of CO_2 emission reduced 52.2t-CO_2(estimate)
				E	Renewal	Rehabilitation of pipes under a project to take measures for aging and deterioration of pipes	347,425	133,100	38.3	N/A				
Hiratsuka City	Public Sewerage Area	251,678	34,901,687	E	Renewal	Renovation of sewerage pipes	331,834	248,500	74.9	346				
Chigasaki City	Sagamigawa Region-related, Chigasaki Public Sewerage Project Planning Area	236,712	31,985,799	E	New	New installation of sewerage pipes	621,006	274,176	44.2	91	N/A			
				E	Renewal	Renovation of sewerage pipes	801,744	570,409	71.1	3,639				
				E	Renewal	Seismic retrofitting of sewerage pipes	118,032	57,415	48.6	794				
Hayama Town	Hayama Treatment Area	24,317	2,012,354	A	New	Expansion of water treatment facilities (Train 4) at Hayama Purification Center	521,203	234,000	44.9			2	0.6	**Project for the development of Hayama Purification Center**[*2] **Expansion of water treatment facilities (Train 4)** ・Annual amount of electricity saved 67,000kWh(estimate)
				A	Renewal	Renewal of central monitoring control systems at Hayama Purification Center	423,014	145,000	34.3					
Kofu City	Otsu Treatment Area	177,650	36,136,936	A	Renewal	Renovation of mechanical and electrical equipment, etc. at Kofu City Purification Center	1,204,315	705,700	58.6			0.9	0.6	**Renovation of mechanical and electrical equipment, etc.** ・Annual amount of electricity saved 53,873kWh(estimate) **Sludge recycling rate:100%** ・Transport to composting and cement companies **Renovation of rainwater pipes** ・Mitigation of flood damage
				E	Renewal	Renovation of rainwater pipes	27,475	26,100	95.0	83				
				E	Renewal	Renovation of sewerage pipes (measures for aging pipes)	976,779	400,100	41.0	1,568				

*2 Please see Case Study for details

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Fukui City	Sakai / Hinogawa Treatment Area	199,777	58,963,359	A	Renewal	Renovation of sand filtration buildings at Hinogawa Purification Center (to enhance water resistance capabilities)	127,670	64,800	50.8			N/A	N/A	
				D	Renewal	Renewal of Asuwa Pump Station	698,895	358,100	51.2					
				E	New	New installation of sewerage pipes	1,938,656	1,746,000	90.1	8,901	255,914			
				E	Renewal	Renewal of sewerage pipes	428,736	362,900	84.6	2,848				
Toyama City	Hamakurosaki Treatment Area	238,141	42,106,300	A	Renewal	Renovation of sewage treatment facilities at Hamakurosaki Purification Center	458,874	354,800	77.3			N/A	N/A	**Use of heat from sewer pipes** ・Extraction of heat from sewer pipes to use it as a heat source for air conditioning equipment in the buildings of the Water and Sewer Bureau **Power generation project using digestion gas** ・A power generation project under a PFI scheme utilizing digestion gas generated in the sewage treatment process **Conversion of sludge into solid fuel** ・Use of sewer sludge converted to solid fuel as auxiliary fuel for waste incineration plants ・Amount of energy newly created Approx.7,632,200kWh/year (FY2021 actual)
				D	Renewal	Renovation of Iwase Sewage Relay Pump Station	36,892	16,600	45.0					
				E	New	Flood control for sewerage pipes	1,130,486	572,100	50.6	N/A	N/A			
				E	New	New installation of sewerage pipes	27,164	24,300	89.5	609	N/A			
				E	Renewal	Renovation of sewerage pipes	473,959	329,700	69.6	4,438				
				E	Renewal	Post-disaster restoration of sewerage pipes	50,494	16,800	33.3	N/A				
				E	Renewal	Seismic retrofitting of sewerage pipes	83,228	37,400	44.9	N/A				
	Osawano Treatment Area	17,079	1,975,090	C	Renewal	Renovation of sludge treatment facilities at Osawano Purification Center	64,000	26,500	41.4					
				E	New	New installation of sewerage pipes	38,649	34,700	89.8	393	N/A			
	Oyama Treatment Area	5,524	1,236,110	C	Renewal	Renovation of sludge treatment facilities at Oyama Sewage Treatment Plant	81,000	32,800	40.5					

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JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Toyama City	Jintsugawa Left Bank Treatment Area	104,152	N/A	D	Renewal	Renovation of Hayahoshi Rainwater Pump Station	47,006	21,000	44.7					
				E	New	New installation of sewerage pipes	40,150	27,200	67.7	145	N/A			
				F	Renewal	Flood control for retention basins	496,979	231,500	46.6					
	Mizuhashi Treatment Area	9,569	1,409,470	A	Renewal	Enhancement of water resistance capabilities of sewage treatment facilities at Mizuhashi Purification Center	24,178	10,800	44.7			N/A	N/A	
				A	Renewal	Renovation of sewage treatment facilities at Mizuhashi Purification Center	30,800	27,700	89.9			N/A	N/A	
Nagano City	Regional-related Public Sewerage Upstream and Downstream Treatment Area	182,239	20,623,906	E	New	New installation of a manhole pump	313,299	157,600	50.3	N/A	N/A			**Renewal of Tobu Terminal Treatment Plant** ・Annual amount of electricity saved 26,562kWh(estimate) **Sludge recycling rate:100%** ・Reuse as raw materials for cement
				E	New	New installation of new rainwater trunk lines	239,872	117,000	48.8	464	N/A			
				E	Renewal	Renovation of sewerage pipes	109,471	92,100	84.1	2,260				
				F	Renewal	Contribution for the renovation, etc. of sewerage facilities	905,122	904,700	100					
	Independent Public Sewerage Eastern Treatment Area	141,562	20,493,288	A	Renewal	Renewal, design, and enhancement of water resistance capabilities at Tobu Terminal Treatment Plant	662,458	288,200	43.5			2.4	6.2	
				E	New	New installation of rainwater trunk lines	276,306	130,900	47.4	90	N/A			
				E	Renewal	Renovation of sewerage pipes	26,840	25,900	96.5	2,080				
				E	Renewal	Renewal of water level gauges	5,093	5,000	98.2	N/A				

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Matsumoto City	Miyabuchi Treatment Area	104,806	20,541,280	C	Renewal	Renovation of sludge dehydrators, etc. at Miyabuchi Purification Center	371,000	150,200	40.5					**Renovation of Purification Center** **A power generation project using digestion gas as fuel** **Sludge recycling rate:100%** ・Transport to composting companies and cement companies **Renewal of mechanical and electrical equipment** ・Contributing to energy-saving effect
				D	New	New installation of pumps at Nagisa Relay Pump Station	60,000	35,000	58.3					
				D	Renewal	Renovation of substation facilities, etc., at Nagisa Relay Pump Station	14,600	6,500	44.5					
				E	Renewal	Renovation of sewerage pipes	541,704	400,700	74.0	N/A				
				E	Renewal	Seismic retrofitting of sewerage pipes	586,673	325,300	55.4	N/A				
	Ryoshima Treatment Area	70,953	12,192,672	C	Renewal	Renovation of sludge treatment facilities at Ryoshima Purification Center	349,000	154,400	44.2					
Gifu City	Central Treatment Area, etc.	374,810	552,777,646	C	Renewal	Renovation of sludge treatment facilities	879,331	380,300	43.2					
				E	New	Installation of additional sewerage pipes	5,015	2,600	51.8	17	800			
				E	New	Installation of additional rainwater pipes	305,209	134,200	44.0	154	N/A			
				E	Renewal	Renovation and seismic retrofitting of sewer pipes	756,658	478,300	63.2	4,138				
Fuji City	Eastern Treatment Area	89,752	12,789,730	A	Renewal	Anticorrosion work for the settling basin control building at Tobu Purification Center	50,677	49,400	97.5			N/A	N/A	
				E	New	New installation of sewerage pipes	449,056	338,100	75.3	1,409	92,944			
	Western Treatment Area	107,435	14,789,214	E	New	New installation of sewerage pipes	856,575	598,300	69.8	2,787	227,294			

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JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Shimizu Town	**Regional Public Sewerage Kanogawa Left Bank Treatment Area**	9,407	466,759	E	New	New installation of sewerage pipes	206,151	82,400	40.0	1,248	205,342			
Okazaki City	**All areas of Okazaki City**	343,594	36,501,444	A	Renewal	Renovation of equipment, etc. in treatment plants	193,275	61,500	31.8			N/A	N/A	
				D	Renewal	Renovation of mechanical and electrical equipment at Daimon Rainwater Pump Station	21,865	20,500	93.8					
				E	New	New installation of sewerage pipes	1,098,660	663,400	60.4	7,355	367,155			
				E	New	New installation of rainwater pipes	2,993,732	1,458,400	48.7	1,092	N/A			
				E	Renewal	Seismic retrofitting of sewerage pipes	96,972	45,900	47.3	N/A				
				E	Renewal	Renovation of sewerage pipes	1,263,146	1,074,000	85.0	6,639				
Tokai City	**Tokai Treatment Area**	98,709	9,058,139	A	Renewal	Renewal of blowers at Tokai City Purification Center	84,326	33,730	40.0			1.43	0.3	**Expansion of pump facilities at Tempou Pump Station** ・Enhancement of drainage capabilities and energy efficiency
				D	Renewal	Expansion of pump facilities and settling basins at Tempou Pump Station	756,839	340,570	45.0					
				E	New	New installation of sewerage pipes	839,486	648,500	77.2	3,300	668			
Kanie Town	**Gakutoshinden Treated Subdivision (Genji 3 -chome)**	403	199,000	E	New	New installation of sewerage pipes	661,417	167,250	25.3	3,087	199,000			

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Eligible Projects

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Yokkaichi City	**Public Sewerage Area**	252,655	34,797,853	E	New	New installation of sewage pipes in Ikuwa areas	5,274,533	2,868,100	54.4	8,357	326,428			
Ise City	**All areas of Ise City**	71,489	6,168,960	D	Renewal	Renewal of mechanical and electrical equipment at Fukiage Pump Station	231,329	125,520	54.3					
				E	New	New installation of sewerage pipes	1,343,553	714,600	53.2	10,784	N/A			
				E	Renewal	Renewal of sewerage pipes	23,833	17,000	71.3					
				E	New	New installation of rainwater pipes	136,700	68,300	50.0	N/A	N/A			
				E	Renewal	Renewal of rainwater pipes	94,954	47,770	50.3	N/A				
				F	New	Maintenance on buildings of the Water and Sewer Bureau	202,405	192,510	95.1					
				F	New	Contribution for the construction of regional sewerage systems	333,335	330,900	99.3					
Matsusaka City	**All treatment areas in Matsusaka**	99,238	8,508,735	E	New	New installation of sewerage pipes	1,554,316	971,326	62.5	8,267	165,296			
	All drainage areas in Matsusaka	18,133	8,800,445	E	New	Installation of additional sewerage pipes	236,806	166,674	70.4	222	N/A			
Kuwana City	**Kuwana Central Treated Subdivision, etc.**	112,703	12,843,824	D	Renewal	Renovation of building facilities and electrical equipment at Sumiyoshi Pump Station, etc.	382,600	172,100	45.0					
				D	Renewal	Renovation of electrical equipment at Nishibessho Pump Station	40,000	18,000	45.0					
				E	New	New installation of sewerage pipes	1,301,707	735,200	56.5	10,928	423,421			

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JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Uji City	Higashiuji/ Rakunan Treatment Area	176,210	18,350,497	C	Renewal	Maintenance of digestion tanks at Higashiuji Purification Center	9,952	6,400	64.3					**Maintenance of digestion tanks at Higashiuji Purification Center** ・Annual amount of electricity saved 191kWh(actual) **Sludge recycling rate:69.5%** ・Conversion to raw materials for cement and fertilizers **Renovation of Obaku Drainage Pumping Station** ・Improvement of operational efficiency by renewing of rainwater pimps ,etc.
				D	Renewal	Renovation of water treatment and electrical equipment at Obaku Drainage Pumping Station	200,100	100,000	50.0					
				E	New	New installation of sewerage pipes	389,477	384,600	98.7	971	4,700			
				E	Renewal	Renovation of sewerage pipes	187,136	154,300	82.5	1,659				
				F	New	Contribution for the construction of regional sewerage systems	200,663	199,500	99.4					
Yao City	Kawamata Treatment Area	245,348	44,859,730	E	New	New installation of sewerage pipes	389,860	319,435	81.9	873	175,495			
				E	Renewal	Renovation of sewerage pipes	611,656	501,165	81.9	593				
				F	New	Contribution for the construction of regional sewerage systems (Maintenance of sewerage pipes,etc.)	187,929	187,927	99.9					
				F	Renewal	Contribution for the construction of regional sewerage systems (Renovation of treatment plants,etc.)	119,965	119,873	99.9					
	Imaike Treatment Area	N/A	N/A	F	New	Contribution for the construction of regional sewerage systems (Maintenance of treatment plants)	54	44	81.5					
				F	Renewal	Contribution for the construction of regional sewerage systems (Renovation of treatment plants,etc.)	73	56	76.7					
Izumisano City	Pipe installation areas	1,782	193,347	E	New	Additional installation, maintenance, renovation, seismic retrofitting, etc. of sewerage pipes	1,749,804	980,200	56.0	6,000	193,347			

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JFM

Eligible Projects

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Suita City	Kawazura Treatment Area	31,301	8,048,941	A	Renewal	Renovation of disinfection facilities in sewage treatment plants	11,390	8,063	70.8			N/A	N/A	
				E	New	New installation of sewerage pipes	90,336	63,949	70.8	N/A	N/A			
				E	Renewal	Renewal of sewerage pipes	35,809	25,350	70.8	189				
	Central Treatment Area	204,607	30,078,212	E	New	New installation of sewerage pipes	39,796	28,172	70.8	209	N/A			
				E	Renewal	Renovation of sewerage pipes	115,637	81,859	70.8	135				
				E	Renewal	Seismic retrofitting of sewer pipes	19,934	14,111	70.8	513				
	Minamisuita Treatment Area	129,397	21,448,040	A	Renewal	Renovation of equipment for rainwater pumps at Minamisuita Sewage Treatment Plant	27,518	19,480	70.8			N/A	N/A	
				A	Renewal	Renovation of inflow and outflow gate equipment for rainwater settling basins at Minamisuita Sewage Treatment Plant	8,632	6,110	70.8			N/A	N/A	
				A	Renewal	Renovation of equipment for sewage settling basins at Minamisuita Sewage Treatment Plant	334,566	236,839	70.8			N/A	N/A	**Renovation of lighting equipment at Minamisuita Sewage Treatment Plant** ・Annual amount of electricity saved 80,557kWh (estimate)
				A	Renewal	Renovation of exterior walls of the water quality testing laboratory / the water treatment administration building at Minamisuita Sewage Treatment Plant	16,956	12,003	70.8			N/A	N/A	
				A	Renewal	Renovation of waterproofing on the rooftop of the water quality testing laboratory / the water treatment administration building at Minamisuita Sewage Treatment Plant	20,066	14,205	70.8			N/A	N/A	
				A	Renewal	Renovation of lighting equipment at Minamisuita Sewage Treatment Plant	47,809	33,844	70.8			N/A	N/A	
				A	Renewal	Renovation of water treatment deodorization equipment, etc., at Minamisuita Sewage Treatment Plant	1,450	1,026	70.8			N/A	N/A	
				A	Renewal	Preparation for the acquisition of land for Minamisuita Sewage Treatment Plant	2,851	2,018	70.8			N/A	N/A	
				E	Renewal	Seismic retrofitting of sewerage pipes	36,754	26,018	70.8	184				
				E	Renewal	Renovation of sewerage pipes	108,000	76,453	70.8	651				

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Eligible Projects

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Himeji City	Central Treatment Area, Eastern Treatment Area	474,492	95,767,041	A	Renewal	Renovation of mechanical and electrical equipment in sewage treatment facilities at Chubu Treatment Plant	35,819	14,033	39.2			4.2	1.1	**Sludge recycling rate:100%** ・Transport of the entire amount of sludge to Hyogonish Sludge Center for reuse as construction materials
				A	Renewal	Renovation of mechanical and electrical equipment in sewage treatment facilities at Tobu Treatment Plant	87,313	28,463	32.6			9.6	0.68	
				D	New	Maintenance of mechanical and electrical equipment in pump stations at treatment plants in eastern areas	78,096	78,096	100					
				D	Renewal	Renovation of mechanical and electrical equipment at pump stations in central treatment areas	44,239	44,239	100					
				E	New	Maintenance of pipes in public sewerage areas	1,151,364	1,089,030	94.6	N/A	N/A			
				E	Renewal	Renovation of pipes in public sewerage areas	515,842	402,539	78.0	N/A				
Amagasaki City	Eastern Treatment Area, etc.	453,636	87,269,372	D	Renewal	Renovation of mechanical and electrical equipment for sewage pumps at Takada Relay Pump Station	343,121	100,900	29.4					**Renewal of mechanical and electrical equipment and the enhancement of capabilities of rainwater pumps** ・Contributing to energy-saving effects, including the reduction of electricity consumption
				D	Renewal	Renovation of mechanical and electrical equipment for rainwater pumps at Kuriyama Relay Pump Station	331,955	97,600	29.4					
				D	Renewal	Renovation of mechanical equipment for rainwater pumps in the administration building at Osho Relay Pump Station	584,585	171,800	29.4					
Nishinomiya City	Nishinomiya Treatment Area	479,564	75,304,301	C	Renewal	Renovation of blowers at Koshienhama Purification Center	175,450	89,953	51.3					
				C	Renewal	Renovation of blowers at Edagawa Purification Center	95,150	47,575	50.0					
				D	Renewal	Renovation of rainwater discharge gates at Uedaminami Pump Station	194,700	97,350	50.0					
				E	Renewal	Renovation of sewerage pipes	1,167,379	809,959	69.4	3,560				

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Kakogawa City	Public Sewerage Project Area	233,178	34,005,421	A	Renewal	Renewal of mechanical and electrical equipment in regional sewerage systems	92,907	88,700	95.5			N/A	N/A	**Renewal of mechanical and electrical equipment** ・Contributing to energy-saving effect
				D	Renewal	Renewal of mechanical and electrical equipment at pump stations	331,199	6,800	2.1					
				E	New	Maintenance of sewerage pipes	4,589,845	1,636,700	35.7	7,756	113,320			
	Specific Environmental Conservation Public Sewerage Project Area	7,178	670,947	E	New	Maintenance of sewerage pipes	57,359	54,400	94.8	388	3,159			
Minamiawaji City	Matsuho/ Minato Treatment Area	1,253	69,798	E	New	New installation of sewerage pipes	678,117	384,269	56.7	N/A	N/A			**Maintenance of sewerage pipes in Nagata Area** ・Reduction of electricity consumption by integrating Nagata Purification Center, a drainage plant in an agricultural community, into Yagi/Enami Purification Center ・Annual amount of electricity saved 5,648kWh(actual) **Sludge recycling rate:100%** ・Transport to private companies other than sewerage facilities for composting **Renewal of machinery and equipment** ・Maintenance of sewage treatment capabilities leading to preservation of public water quality and improvement of living environment
	Yagi / Enami Treatment Area	3,772	337,501	A	Renewal	Renovation of instrumentation equipment at Yagi/Enami Purification Center	11,235	11,235	100			4.6	0.3	
				D	Renewal	Renovation of mechanical equipment at pump stations	3,025	3,025	100					
				E	New	Maintenance of sewerage pipes	27,743	14,050	50.6	N/A	N/A			
	Fukura Treatment Area	4,207	386,483	A	Renewal	Renovation of mechanical equipment, etc., at Fukura Purification Center	17,303	17,303	100			2.4	0.672	
				B	Renewal	Renovation of UV sterilizers at Fukura Purification Center	40,820	18,459	45.2					
				D	Renewal	Renovation of mechanical and electrical equipment at pump stations	2,738	2,738	100					
				E	Renewal	Renovation of sewerage pipes	34,050	34,050	100	N/A				
	Maruyama Treatment Area	549	40,140	C	Renewal	Renovation of power control panels, etc., at Maruyama Purification Center	88,255	44,932	50.9					
				D	Renewal	Renovation of mechanical and instrumentation electrical equipment at pump stations	2,981	2,981	100					

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Wakayama City	Central Treatment Area, etc.	135,920	26,728,164	A	Renewal	Renovation of Wakayama Terminal Treatment Plant	400,657	192,074	47.9			3.55	0.85	**Maintenance of pump stations and treatment plants** ・Prevention of discharge of untreated sewer into public water areas during flooding or heavy rains
				D	New	Maintenance and expansion of Matsue Rainwater Pump Station	613,816	274,754	44.8					
				D	Renewal	Renovation of Nakanoshima Sewage Relay Pump Station	58,300	24,885	42.7					
				E	New	New installation of sewerage pipes	2,148,874	1,076,651	50.1	4,675	145,032			
				E	Renewal	Renovation of sewerage pipes	151,608	76,636	50.5	830				
Tottori City	Akisato Treatment Area, etc.	133,899	21,900,821	C	Renewal	Renovation of the administration building, etc.at Akisato Sewer Terminal Treatment Plant, etc.	186,290	71,490	38.4					**Sludge recycling rate:100%** ・Raw materials for cement **Use of heat generated during sludge incineration** ・Use of digestion gas generated from sewer sludge as auxiliary fuel for incineration **Renovation of mechanical and electrical equipment, etc. at Yoshinari Pump Station, etc.** ・Annual amount of electricity saved 22,234kWh(actual)
				D	Renewal	Renovation of mechanical and electrical equipment, etc. at Yoshinari Pump Station, etc.	1,184,920	540,190	45.6					
				E	New	New installation of sewerage pipes	352,941	230,673	65.4	775	N/A			
				E	Renewal	Renovation of sewerage pipes , etc.	873,288	552,947	63.3	1,085				
Sakaiminato City	Sakaiminato Treatment Area	28,493	2,844,489	A	Renewal	Renovation of the main pump building, sludge treatment buildings, etc. at sewerage centers (design of linear analysis, etc.)	71,300	14,150	19.8			4.7	0.77	**Sludge recycling rate:100%** ・Recycling of dewatered sludge by waste disposal contractors (conversion to carbide products, applications: steelmaking heat insulator, biomass fuel) ・Sludge disposal amount (FY2024 actual): 2,324.62 tons
				E	New	New installation of sewerage pipes	1,567,531	911,099	58.1	8,537	86,683			
				E	New	Maintenance of rainwater pipes	94,586	18,772	19.8	N/A	N/A			
				E	Renewal	Renovation of rainwater pipes	88,269	76,979	87.2	N/A				

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Hiroshima City	All areas of Hiroshima City	1,117,080	153,663,973	E	Renewal	Renovation, etc. of aging pipes, etc. under a public sewerage project	2,100,000	1,040,000	49.5	N/A				
Kure City	Shingu Treatment Area	82,794	11,353,444	A	Renewal	Renewal of monitoring control systems at Shingu Purification Center	623,262	294,438	47.2			1.2	0.9	**Sludge recycling rate: 100%** ・Conversion to compost and cement **Renewal of pipes** ・Prevention of underground pollution caused by sewage discharged during earthquakes or other natural disasters
				C	Renewal	Implementation design of the renewal of sludge dehydrators at Shingu Purification Center	14,493	7,259	50.1					
				F	Renewal	Renovation of exterior walls of sludge treatment buildings at Shingu Purification Center	40,702	38,443	94.4					
	Hiro Treatment Area	64,050	8,925,446	A	Renewal	Renewal of monitoring control systems at Hiro Purification Center	592,752	273,467	46.1			4.4	1	
				D	Renewal	Rehabilitation of sewerage pipes at Hiro Pump Station	8,217	7,761	94.5					
				D	Renewal	Inspection on pump facilities at Nada Rainwater Pump Station	1,872	937	50.1					
	Tenno Treatment Area	12,316	1,155,483	C	Renewal	Design for anticorrosion investigation on sludge mixing tanks at Tenno Purification Center	8,541	8,067	94.5					
	Yasuura Treatment Area	8,416	737,103	D	Renewal	Inspection on pump facilities at Tsukimi Koen Pump Station	1,797	900	50.1					
	All areas of Kure City	181,272	23,049,026	E	New	New installation of sewerage pipes	6,818	6,365	93.4	N/A	6,898			
				E	Renewal	Renewal of sewerage pipes	401,161	213,348	53.2	616				
				E	Renewal	Implementation design and project plans for sewerage pipes	258,647	219,915	85.0	N/A				

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Mihara City	Nutagawa Treatment Area	41,543	4,844,026	D	Renewal	Maintenance of pump buildings (Civil Engineering Dept.) at Minami Rainwater Drainage Pump Station	200,220	5,200	2.6					
				D	Renewal	Enhancement of water resistance capabilities of Miyaoki Rainwater Drainage Pump Station, etc.	57,339	28,200	49.2					
				E	New	New installation of rainwater pipes and sewage pipes	90,125	18,900	21.0	404	N/A			
				F	New	Renovation of drainage pipes	33,157	17,500	52.8					
Fukuyama City	Ashidagawa Treatment Area, Matsunaga Treatment Area	348,621	41,307,782	A	Renewal	Renewal of instrumentation equipment, etc. at Matsunaga Purification Center	51,405	51,405	100			N/A	N/A	
				D	New	Maintenance of facilities at Hitotsuhi Pump Station, etc.	3,104,425	1,562,888	50.3					
				D	Renewal	Seismic retrofitting and renewal of facilities and equipment at Tode Pump Station, etc.	300,596	221,978	73.8					
				E	New	New installation of sewerage pipes	1,351,489	892,000	66.0	32,289	287,151			
				E	Renewal	Renovation of sewerage pipes, etc.	2,054,700	1,600,155	77.9	N/A				
Hatsukaichi City	Hatsukaichi Area, etc.	77,371	8,459,814	A	New	Expansion of main pump facilities at Hatsukaichi Purification Center	117,350	55,474	47.3			6.1	1	**Sludge recycling rate:100%** ・Reused as compost or cement ・Improvement of sludge concentration efficiency in line with the expansion of mechanical concentration facilities
				A	New	Expansion of water treatment facilities at Yuwa Purification Center	333,070	141,005	42.3			2.1	1.5	
				C	New	Expansion of mechanical concentration facilities at Hatsukaichi Purification Center	131,394	62,113	47.3					
				D	New	Expansion of pump facilities at Ogi Pump Station	478,466	239,233	50.0					
				D	Renewal	Seismic retrofitting of buildings at Ogi Pump Station	69,534	34,767	50.0					
				E	New	Installation of additional pipes	1,616,019	1,130,447	70.0	9,531	131,709			
				E	Renewal	Renewal of pipes	60,261	60,261	100	336				

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Iwakuni City	Ichimonji Treatment Area	21,066	7,554,980	A	New	Expansion of on-site pump stations at Ichimonji Terminal Treatment Plant	121,800	20,400	16.7			N/A	N/A	
				A	Renewal	Renovation of high-voltage electrical equipment in blower buildings at Ichimonji Terminal Treatment Plant	88,910	23,400	26.3			N/A	N/A	
				E	New	New installation of sewerage pipes	357,545	126,700	35.4	1,843	N/A			
				E	New	Maintenance of monitoring systems	40,459	38,400	94.9	N/A	N/A			
	Ozu Treatment Area	7,127	793,580	D	Renewal	New construction associated with the relocation of Asahimachi Pump Station	306,690	126,400	41.2					
				E	New	New installation of sewerage pipes	244,939	115,800	47.3	759	N/A			
				E	New	Design for sewerage pipes	32,628	22,800	69.9	1,101	N/A			
	Shunan Treatment Area	13,877	1,995,404	E	New	New installation of sewerage pipes	48,465	6,700	13.8	85	N/A			
Marugame City	Marugame Treatment Area	39,667	8,855,780	A	New	Maintenance of incurrent canals, etc., at Marugame City Purification Center	600,759	379,500	63.2			3.4	0.54	**Maintenance of Marugame City Purification Center** ・Reduction of greenhouse gas emissions through the reduction of plant scale and the introduction of energy-saving equipment ・Annual amount of electricity saved 64,732kWh(estimate)
				D	New	Maintenance of building structures, etc. at Imazu Pump Station	13,625	6,800	49.9					
				E	New	New installation of sewerage pipes	23,100	11,500	49.8	54	414			
				E	Renewal	Maintenance of sewerage pipes	33,524	16,700	49.8	311				
	Ayauta Treatment Area	3,463	421,839	E	New	New installation of sewerage pipes	30,754	15,300	49.7	187	6,120			
	Iiyama Treatment Subdivision	5,168	593,383	E	New	New installation of sewerage pipes	162,098	80,800	49.8	1,344	7,200			
Imabari City	Northern Treatment Area	12,236	1,163,499	A	Renewal	Implementation design for Hokubu Terminal Treatment Plant	38,613	18,100	46.9			N/A	N/A	
				D	Renewal	Seismic retrofitting of Takabeshimo Drainage Pump Station	20,300	5,800	28.6					

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Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Imabari City	Imabari Treatment Area	73,772	13,998,513	C	Renewal	Repair of sludge collectors at Imabari City Sewer Purification Center	136,422	114,455	83.9					Sludge recycling rate:52.3%
				D	Renewal	Implementation design for upgrading of Tachibana Relay Pump Station	87,208	34,668	39.8					
				D	Renewal	Upgrading of power generation facilities at Kitahama Pump Station	1,131,215	261,652	23.1					
				E	New	New installation of sewerage pipes	385,265	153,665	39.9	2,591	11,090			
				E	New	New installation of rainwater pipes	754,349	195,160	25.9	960	4,110			
	Onishi Treatment Area	4,166	363,499	A	New	Expansion of water treatment facilities at Onishi Water Treatment Center	246,320	20,198	8.2			3.75	1.64	
				A	Renewal	Upgrading of dehydrators at Onishi Water Treatment Center	40,883	40,883	100					
				E	New	New installation of sewerage pipes	148,179	53,019	35.8	1,047	2,373			
Saijo City	Saijo Treatment Area	51,266	10,138,139	A	Renewal	Renovation of administration facilities at Saijo Purification Center	30,600	12,200	39.9			2.3	1	Sludge recycling rate:98% (Saijo Purification Center) ・Transport to composting companies and cement companies Renovation of manhole pump ・Annual amount of electricity saved 2,019kWh(estimate)
				D	New	Maintenance of rainwater pump facilities at Funaya Pump Station	246,390	110,900	45.0					
				D	Renewal	Renovation of electrical equipment at Funaya Pump Station	58,770	26,400	44.9					
				D	Renewal	Renovation of electrical equipment at Minatoshinchi Vacuum Pump Station	29,590	13,300	44.9					
				E	New	New installation of sewerage pipes	234,968	167,500	71.3	1,299	17,770			
				E	Renewal	Renovation of sewerage pipes and manhole pump	56,404	26,600	47.2	N/A				

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JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Saijo City	Toyo / Tambara Treatment Area	13,623	2,120,247	A	Renewal	Renovation of administration facilities at Toyotambara Purification Center	13,100	5,200	39.7			6	1.4	**Sludge recycling rate:80%** (Toyotambara Purification Center) ・Transport to composting companies and cement companies
				D	New	Maintenance of rainwater pump facilities at Mitsuya Rainwater Pump Station	175,510	79,000	45.0					
				E	New	New installation of sewerage pipes	45,766	30,500	66.6	410	8,775			
				E	Renewal	Renovation of sewerage pipes	2,736	1,900	69.4	N/A				
Sasebo City	Central Treatment Area	114,842	13,271,933	A	Renewal	Renewal of sludge dehydrators at Chubu Sewage Treatment Plant	639,540	255,800	40.0			N/A	N/A	**Renewal of sludge dehydrators at Chubu Sewage Treatment Plant** ・Sludge water content to be reduced by approx. 0.8%, and annual sludge transport volume reduced from approx. 8,500 tons to approx. 68 tons (estimate) ・Contributing to the reduction of electric power consumption by incinerators to which sludge is transported (disposed of) by reducing the amount of incineration
Yatsushiro City	Yatsushiro Treatment Area, etc.	60,232	5,480,366	C	Renewal	Refurbishment of sludge treatment facilities for septic tanks at a water treatment center	338,800	263,700	77.8					**Installation of additional sludge dehydrators** ・Improvement of operating environment including the reduction of operating time and days in line with increased processing capabilities
				C	Renewal	Installation of additional sludge dehydrators in a water treatment center	154,121	69,300	45.0					
				E	New	New installation of sewerage pipes	247,465	172,600	69.7	2,890	80,180			
				E	Renewal	Renovation of sewerage pipe facilities	17,227	10,900	63.3	11				
Miyazaki City	Aoshima Treatment Area	3,719	738,406	A	Renewal	Renovation and renewal of centrifugal concentrators, etc. at Aoshima Purification Center	12,894	3,305	25.6			N/A	N/A	**Renovation of mechanical and electrical equipment** ・Contributing to environmental improvement through stable sewage treatment
				A	Renewal	Seismic retrofitting of the administration building at Aoshima Purification Center	10,715	2,746	25.6			N/A	N/A	
				D	Renewal	Renovation and renewal of electrical equipment, etc. at pump stations	84,953	21,774	25.6					

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

JFM

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Miyazaki City	Miyazaki Treatment Area	162,254	30,383,503	A	Renewal	Renovation and renewal of egg-shaped digesters, etc. at Miyazaki Treatment Plant	315,396	80,838	25.6			N/A	N/A	Renovation of mechanical and electrical equipment ・Contributing to environmental improvement through stable sewage treatment
				A	Renewal	Seismic retrofitting of egg-shaped digesters, etc. at Miyazaki Treatment Plant	37,272	9,553	25.6			N/A	N/A	
				D	Renewal	Renovation and renewal of electrical equipment, etc. at pump stations	151,967	38,950	25.6					
				D	Renewal	Seismic retrofitting of pump stations	18,531	4,750	25.6					
				E	New	New installation of sewerage pipes	255,695	65,537	25.6	232	1,747			
				E	Renewal	Renovation and renewal of sewerage pipes	1,278,189	327,609	25.6	3,064				
				E	Renewal	Seismic retrofitting of sewerage pipes	732,902	187,848	25.6	N/A				
	Oyodo Treatment Area	149,328	14,838,161	A	New	Maintenance of human waste pretreatment facilities at Oyodo Treatment Plant	24,293	6,226	25.6			N/A	N/A	
				A	Renewal	Renovation and renewal of private power generation facilities, etc. at Oyodo Treatment Plant	346,196	88,733	25.6			N/A	N/A	
				A	Renewal	Seismic retrofitting of the main administration building, etc., at Oyodo Treatment Plant	18,318	4,695	25.6			N/A	N/A	
				D	Renewal	Renovation and renewal of electrical equipment, etc. at pump stations	99,818	25,584	25.6					
				E	New	New installation of sewerage pipes	42,557	10,908	25.6	366	45,774			
				E	Renewal	Renovation and renewal of sewerage pipes	9,898	2,537	25.6	N/A				
	Kibana Treatment Area	13,924	1,688,743	A	renewal	Renovation and renewal of monitoring control systems, etc. at Kibana Treatment Plant	220,586	56,538	25.6			N/A	N/A	
				E	renewal	Renovation and renewal of sewerage pipes	25,739	6,597	25.6	N/A				

【 Facility type 】 A:Sewage Treatment Plant B:Advanced Treatment Plant C:Sludge Treatment Plant D:Pump Station E:Pipes F:Others

Eligible Projects

Borrowing entity	Eligible area	Population of the covered area (persons)	Annual water management capacity (㎥)	Facility type	New / renewal category	Project description	Total project cost (JPY1,000)	JFM loan amount (JPY1,000)	JFM loan amount / Total project cost (%)	Total extension of new / renewed pipes (m)	Volume of treated water to be increased (㎥)	BOD (mg/L)	Phosphorus (mg/L)	Other positive environmental impact
Miyazaki City	Sadowara Treatment Area	25,562	2,330,522	A	Renewal	Renovation and renewal of digesters for storage tanks at Sadowara Purification Center	5,775	1,480	25.6			N/A	N/A	**Renovation of mechanical and electrical equipment** ・Contributing to environmental improvement through stable sewage treatment
				D	Renewal	Renovation and renewal of high pressure air load switches at pump stations	957	245	25.6					
				E	New	New installation of sewerage pipes	6,787	1,740	25.6	35	501			
	Tano Treatment Area	7,219	579,781	A	Renewal	Renovation and renewal of electrical rooms at Tano Purification Center	913	234	25.6			N/A	N/A	
				D	Renewal	Renovation and renewal of pump stations	957	245	25.6					
				E	New	New installation of sewerage pipes	498	128	25.7	N/A	N/A			
Kagoshima City	Southern Treatment Area, Taniyama Treatment Area	462,400	59,875,778	A	Renewal	Renovation of pump facilities, etc. at Nambu Treatment Plant	721,180	334,900	46.4			N/A	N/A	
				A	Renewal	Renovation of centralized monitoring control systems, etc. at Nambu Treatment Plant	641,222	300,900	46.9			N/A	N/A	
				A	Renewal	Seismic retrofitting of Nambu Treatment Plant	7,703	3,300	42.8			N/A	N/A	
				A	Renewal	Seismic diagnosis of Taniyama Treatment Plant	15,943	6,700	42.0			N/A	N/A	
				D	Renewal	Renovation of pump stations	22,338	7,000	31.3					
				E	New	New installation of sewerage pipes	388,561	286,600	73.8	4,691	67,135			
				E	Renewal	Renovation of sewerage pipes	1,031,382	867,700	84.1	7,238				
				F	Renewal	Upgrading of treatment plants	79,684	67,600	84.8					

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Japan Finance Organization for Municipalities (JFM) Green Bond Framework

1. Use of Proceeds

JFM will use the amount equal to the net proceeds from the Green Bonds to finance or refinance the existing or future projects that satisfy the eligibility criteria set forth below.

Eligible Green Project Category	Eligibility Criteria	Environmental Objective	Alignment with UN SDGs
Sustainable water and wastewater management	Development, construction, maintenance, updates, operation of sewerage related assets, which comply with sewerage drainage standards set by Japanese law[1]	Pollution Prevention and Control Water Resource Conservation Energy use of sewerage sludge, sewerage sludge recycle	
	Development, construction, maintenance, renewal, and operation of water supply related facilities that meet the standards prescribed by Japanese law[2]	Effective utilization and conservation of water resources	

*1 Sewerage Act (Act No. 79 of 1958 , as amended), Water Pollution Prevention Act (Act No. 138 of 1970, as amended), Purification Tank Act (Act No. 43 of 1983, as amended)
*2 Water Supply Service Act (Act No.177 of 1957, as amended)

2. Process for Project Evaluation and Selection

The loan department will confirm that the borrower has obtained consent or approval from the Minister for Internal Affairs and Communications, or the respective prefectural governors on the borrowing, in accordance with the requirements of Japanese law. JFM's Sustainability Working Group will conduct surveys with the relevant local municipalities to gain impact metrics of the Eligible Projects.

3. Management of Proceeds

JFM's Sustainability Working Group will track, monitor and account for the allocation of the Proceeds from Green Bonds and ensure that the Proceeds from Green Bonds are appropriately managed in cash or cash equivalents until they are allocated to loans or refinancing for Eligible Projects.

4. Reporting

JFM's Sustainability Working Group will conduct a survey on Eligible Projects that are selected to ensure that the total amount of loans exceeds the amount of the Proceeds from Green Bonds, and JFM plans to report the following information on its website annually until the full Proceeds from Green Bonds are allocated.

- Total amount and breakdown of Eligible Projects (number of projects and loan amounts by facility type and by new construction or renovation/replacement)
- (Estimated) key impact indicators for the borrowing entity or the treatment area

Business	Facility Type	Estimated Key Impact Indicators
Sewerage business	Sewage treatment facilities, Advanced treatment facilities, Sludge treatment facilities, Pump stations, Pipes, Others	Project descriptions, Total project costs, Population of the covered area, Water management capacity and water quality impact (where relevant), Newly constructed pipe length and/or total pipe length (where relevant), Other positive environmental impacts
Water supply business	Water intake facilities, Water purification facilities, Water distribution facilities, Pipes, Others	Project descriptions, Total project costs, Population of the covered area, Water supply/purification/intake volumes (m3), Water Efficiency Rate in certain water treatment area, Newly constructed pipe length and/or total pipe length (where relevant), Other positive environmental impacts

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