# Status of achievement of business indicators set forth in the "Management Plan 2021"

Status of achievement of business indicators (19 indicators\*)

\*Exclude 7 indicators out of the total of 26 indicators for which the target is zero because they are still being developed

In FY2023, targets were achieved in 12 indicators, including countermeasures for earthquake disaster, improvement of combined sewer system, and improving quality of treated wastewater.

We will continue to steadily promote our business while dealing appropriately with those measures for which the target has not been achieved.

#### (1) Principal measures for wastewater service in Wards

				Medium-	Cumulativ	Manage	ment Plan	2021 (	2021 - 2	2025)		Cumulative
Measures		Business indicators	Unit	to long- term	e total at the end of	5-year total FY2021 2022		<del>-</del> .	FY2023		Main businesses details in FY2023	total at the end of FY
				target values	FY2020	target value	actual total	Target value	Actual value	Achievem ent rate		2023
	Reconstruction of facilities(sewer	Area where the branch lines of the first stage reconstruction area (four treatment districts in the center of Tokyo) have been rebuilt	ha	16,300	10,082	3,500	1,442	700	669	96%	Due to reasons such as unsuccessful bids and the time required for external adjustments, the actual result was 669 ha, resulting in an achievement rate of 96% toward the target for FY2023.	12 193
	pipe)	Rebuilt extension includes 47 aged trunk sewers and trunk sewers that require measures based on surveys of trunk sewers	km	300	87	35	15	7	8	114%	8 kilometers of trunk sewers were rebuilt, including Totsuka-Higashi Trunk Sewer (Shinjuku Ward).	109*
Ensure	Reconstruction of facilities (WWTP & pump station)	Number of rebuilt major equipment units	unit	4,000	2,321	450	235	124	104	84%	104 major equipment units were rebuilt at Shinsuna Pump Station (Koto Ward), etc. Since the indicators were implemented ahead of schedule in FY2022, the achievement rate against the target for FY2023 was 84%.	2,660
re the	Flood control	Priority districts	district	67	25	7	3	0	0(20)	-	Facilities are being developed in districts such as "Sengoku in Bunkyo Ward and Minami-Otsuka in Toshima Ward."	
safe and	Countermeasures for earthquake disaster (sewer pipe)	Number of facilities that have implemented earthquake retrofit of sewer pipes that receive wastewater	facility	5,900	4,315	1,200	471	256	214	84%	Earthquake retrofit of sewer pipes that receive wastewater from temporary accommodation facilities and other facilities was implemented at 214 facilities. Due to factors such as unsuccessful bids and revisions, the achievement rate was 84%.	5,000
comfortable l		Extension of roads where measures to prevent the surfacing of maintenance holes have been implemented	km	1,620	1,250	250	94	79	33	42%	In order to ensure the traffic functionality of pole-free roads and other roads in areas at high risk of liquefaction, 33 km of measures to prevent the surfacing of maintenance holes were implemented, Due to factors such as unsuccessful bids and revisions, the achievement rate was 42%.	1,376*
living envi		Area where earthquake retrofit of sewer pipes and measures to prevent the surfacing of maintenance holes were implemented in the remaining districts within the district	ha	10,000	6,982	2,500	914	461	421	91%	Earthquake retrofit of 421 ha of sewer pipes in the remaining districts within the district was implemented. Due to external adjustments such as conflicts with redevelopment, the achievement rate was 91%.	8317
environment	Countermeasures for earthquake disaster (WWTP & pump station)	Number of facilities that have been made earthquake retrofit in all systems to ensure that the necessary wastewater system functions are maintained in the event of an earthquake disaster	facility	97	29	12	4	3	3	100%	Earthquake retrofit was completed at Hamacho Pumping Station (Chuo Ward) and two other facilities.	36
		Number of facilities equipped with emergency power generation facilities to ensure stable power for operation in the event of a power outage	facility	97	83	6	1	2	1	50%	Development of an emergency power generation facility was completed at Oji Pump Station (Kita Ward). Construction work has already begun on one facility that was scheduled for completion, but it is taking time to remove obstructions. As a result, the target was not achieved.	85
		Number of facilities that have completed the introduction of dual-fuel power generation equipment that can run on either kerosene or city gas	facility	13		1	O(1)	0	3(1)	-	Coordination for introduction is underway at Morigasaki Wastewater Treatment Plant (Ota Ward).	4

<sup>\*</sup> The cumulative total at the end of FY2023 does not equal the sum of the cumulative total at the end of FY2020 and the actual values for each year, due to rounding of decimal fraction in FY2023 actual values.

				Medium-	Cumulative	Manage	ment Plan	2021 (2	2021 - 1	2025)		Cumulative
Measures		Business indicators	Unit	to long- term target values	total at the end of FY2020	5-year total target value	FY2021 - 2022 actual total	Target value	FY2023 Actual value	3 Achievement rate	Main businesses details in FY2023	total at the end of FY 2023
Ensure the safe and comfortable living environment	Strengthening of reliability and efficiency of	Number of sections where the development of mutual sludge transfer facilities has been completed	section	5	3(O)	0(2)	0	0	0	_	Coordination is underway between Toubu Sludge Plant (Koto Ward) and the Kasai Wastewater Treatment Plant (Edogawa Ward) to develop a mutual sludge transfer facility.	3
e safe and able living nment	sludge treatment	Number of sections where the installation of multiple sludge transportation pipes has been completed	section	13	10(0)	2(1)	O(1)	0	O(1)	-	Development of multiple sludge transportation pipes is underway between Ochiai Wastewater Treatment Plant (Shinjuku Ward) and Miyagi Wastewater Treatment Plant (Adachi Ward).	10
CC	Improvement of combined sewer system	Storage capacity of storage facilities, etc.	10,000 m <sup>3</sup>		150	25	0	20	20	100%	Ukima Wastewater Treatment Plant and other facilities have secured the storage capacity necessary for compliance with the Order for Enforcement of the Sewerage Act.	170
Contributing to improving the ware environment and creating an environmentally friendly city		Storage capacity necessary for compliance with the Order for Enforcement of the Sewerage Act (to be completed by the end of FY2023)	,		150	20	0	20	20	100%		170
o improvi ent and nentally f	Improving quality of treated	Combined capacity for advanced and semi- advanced wastewater treatment	10,000 m <sup>3</sup> / day	634	343	109	74	5	18	360%	Development of semi-advanced wastewater treatment facilities with a capacity of 180,000 m <sup>3</sup> /day has been completed at two facilities, including Miyagi Wastewater Treatment Plant (Adachi Ward).	436
ng the water creating riendly city		Capacity for advanced wastewater treatment	10,000 m <sup>3</sup> / day		86	O(45)	0	0	O(12)	-		86
ater	wastewater	Capacity for semi-advanced wastewater treatment	10,000 m³/ day		257	109	74	5	18	360%		350
Ensure the safe and comfortable living environment	Operation and maintenance of sewer pipes	Number of locations where street collapse countermeasures were implemented, such as replacing house connections and rehabilitation methods (including those due to rebuilding, etc.)	1,000 locations	1,950	889	135	52	27	25	93%	Replacement work was carried out on house connections for sewer pipes at 25,000 locations to replace them with impact-resistant rigid polyvinyl chloride pipes. As a result of the preliminary survey carried out prior to the rebuilding work, the number of house connections that needed to be replaced was lower than expected, so the annual target value was not reached.	966

Target values are set based on the completion of measures, and some indicators have zero values. The business is being promoted continuously, and the values are indicated in parentheses.

### (2) Principal measures for regional sewerage services in the Tama Region

					Medium-	Cumulative	Management Pla		n 2021	(2021 - :	2025)		Cumulative	
	N	Measures (	Business indicators	Unit	to long- term	total at the	5-year total	FY2021 -		FY2023		Main businesses details in FY2023	total at the	
				Jc	target values	end of FY2020	target value	/0//	Target value	Actual value	Achieveme nt rate		end of FY 2023	
	Ensure comfo env	Reconstruction of facilities (WWTP & pump station)	Number of rebuilt major equipment units	unit	500	193	55	13	16	17	106%	Reconstruction of major equipment units was implemented at Minami Tama Wastewater Treatment Plant (Inagi City) and other facilities.	223	
	Ensure the safe and comfortable living environment	for earthquake disaster (WWTP & pump	Number of facilities that have been made earthquake retrofit in all systems to ensure that the necessary wastewater system functions are maintained in the event of an earthquake disaster	facility	9	2	2	2	0	0(2)	-	Earthquake retrofit of wastewater system facilities have progressed at two facilities, including Kiyose Wastewater Treatment Plant (Kiyose City).	4	
-	Contributing to imwater environment an environmentally	Improving quality of treated wastewater	Combined capacity for advanced and semi- advanced wastewater treatment	10,000 m³/ day	148	112	25	4	1	1	100%	Advanced wastewater treatment facility was developed at Kita Tama No. 2 Wastewater Treatment Plant (Kunitachi City) with a capacity of approximately 20,000 m³/day. (This increased the plant's capacity by approximately 10,000 m³/day)	116*	
	to improvi ment and o entally frier		Capacity for advanced wastewater treatment	10,000 m <sup>3</sup> / day		89	6	4	1	1	100%		93*	
	improving the ent and creating tally friendly city		Capacity for semi-advanced wastewater treatment	10,000 m <sup>3</sup> / day		23	19	0	0	0(5)	-		23	

Target values are set based on the completion of measures, and some indicators have zero values, however, the business is being promoted continuously, and the values are indicated in parentheses.

\* The cumulative total at the end of FY2023 does not equal the sum of the cumulative total at the end of FY2020 and the actual values for each year, due to rounding of decimal fraction in FY2023 actual values.

### (3) Energy and global warming countermeasures (Wards and the Tama Region)

					Medium-	Cumulative	Mana	gement Pla	an2021	(2021 -	2025)		Cumulative
Measures		Measures	Business indicators	Unit	to long- term	total at the end of		FY2021 -	FY2023			Main businesses details in FY2023	total at the end of FY
					target values	FY2020	5-year total target value		Target value	Actual value	Achievement rate		2023
an envir	Contributir	Energy management and global warming countermeasures	Number of energy-saving equipment units introduced in the water treatment process and sludge treatment process	unit	510	340	86	31	21	22	105%	Energy-saving sludge dewatering equipment was introduced at Kasai Wastewater Treatment Plant (Edogawa Ward), etc.	393
onmentally fri	o improv		Number of incinerators that have been upgraded to energy-saving incinerators	incinerator		7	3	0	2	2	100%	Energy-saving incinerators were introduced at two locations, including Kiyose Wastewater Treatment Plant (Kiyose City).	9
ng the water creating riendly city	ig the water		Number of incinerators that have been upgraded to energy-independent incinerators	incinerator	21	21 0	3	1	1	1	100%	At Kasai Wastewater Treatment Plant (Edogawa Ward), an energy-independent incinerator that can supply the electricity needed by the incinerator by generating power using waste heat from sludge incineration was introduced.	2

Target values are set based on the completion of measures, and some indicators have zero values. The business is being promoted continuously.

# Status of business effectiveness set forth in the "Management Plan 2021"

	Measures	Business effectiveness	Unit	End of FY2020 (actual results)	End of FY2021 (actual results)	End of FY2022 (actual results)	End of FY2023 (actual results)	End of FY2025 (plan)
	Reconstruction of facilities (sewer pipe)	Percentage of the area of the first stage reconstruction area (approx. 16,300 ha) for which the rebuilding of sewer pipes has been completed.	%	62	66	71	75	83
	Reconstruction of facilities (WWTP & pump station)	Percentage of rebuilt major equipment units	%	58	60	64	67	69
	Flood control	Percentage of districts that have demonstrated effectiveness in priority districts	%	37	42	42	42	48
	Countermeasures for earthquake disaster (sewer pipe)	Percentage of facilities that have implemented earthquake retrofit of sewer pipes that receive wastewater	%	73	78	81	85	93
Wards	Countermeasures for earthquake disaster	Percentage of facilities that have been made earthquake retrofit in all systems to ensure that the necessary wastewater system functions are maintained in the event of an earthquake disaster	%	30	32	34	37	42
	(WWTP & pump station)	Percentage of facilities that have the power necessary for stable operation in the event of a power outage	%	85	86	86	87	91
	Strengthening of reliability and efficiency of sludge treatment	Percentage of sections where the reliability of sludge treatment has been strengthened*1 in the event of an earthquake disaster, etc.	%	69	69	69	69	85
	Improvement of combined sewer system	Percentage of areas where storage facilities and other facilities necessary for improving water quality have been developed in 14 bodies of water, etc.	%	54	54	54	61	63
	Improving quality of treated wastewater	Percentage of combined capacity for advanced and semi-advanced wastewater treatment	%	54	60	66	69	71
	Reconstruction of facilities	Percentage of rebuilt major equipment units	%	39	39	41	45	50
Tama	Countermeasures for earthquake	Percentage of facilities that have been made earthquake retrofit in all systems to ensure that the necessary wastewater system functions are maintained in the event of an earthquake disaster	%	22	44	44	44	44
	Improving quality of treated wastewater	Percentage of combined capacity for advanced and semi-advanced wastewater treatment	%	76	76	78	78	93
Wards & Tama	Energy management and global warming countermeasures	Reduction rate of greenhouse gas emissions from wastewater services*2	%	21	20	19	28	50*3

	Measures	Business effectiveness	Unit	FY1995 (number of occurrences)	FY2021 - 2023 (average number of occurrences)	FY2021 - 2025 (average number of predicted occurrences)
Wards	Reconstruction of facilities(sewer pipe)	Number of occurrences of street collapse in the first stage reconstruction area (comparison with the number of occurrences in FY1995, immediately after reconstruction began)	occurrence / year	809	82	110

<sup>\*1</sup> Strengthening reliability of sludge treatment: Development of mutual sludge transfer facilities and multiple sludge transportation pipes must be completed

<sup>\*2</sup> Reduction rate of greenhouse gas emissions: Reduction rate of greenhouse gas emissions compared to FY2000 levels (based on the "Earth Plan 2023", the emission factor for electricity is calculated using the emission factor (coefficient of variation) for each electricity provider)

<sup>\*3</sup> Target value for FY2030 based on the "Earth Plan 2023"