4 September, 2023 Bureau of Finance

## Announcement of Decision on Target Projects for the Tokyo Green Bonds in FY2023

The Tokyo Metropolitan Government has announced its decisions regarding the appropriation of funds to projects eligible for the Tokyo Green Bonds to be issued in FY2023.

No	Project	Tokyo Green Bond Environmental Category (See attachment)	Amount to be appropriated (millions of yen)	Expected environmental impact
1	Heat island countermeasures (heat insulation and water absorption)	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	1,300	<ul> <li>Develop and extend length of heat insulation and water absorption</li> <li>14.716 km</li> </ul>
2	Rebuilding and repairing of facilities	<ol> <li>Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources</li> <li>Realization of a Prosperous Society in Harmony with the Environment that Continues to Benefit from Biodiversity</li> </ol>	11,084	<ul> <li>✓ Increase use of renewable energy (annual total) 5,121,051.91 kWh</li> <li>✓ Expand green areas 10,287.94 m<sup>2</sup></li> </ul>
3	Installation of LEDs for facilities and roads	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	1,131	<ul> <li>✓ Reduce energy consumption (annual total)</li> <li>7,084,600 kWh</li> </ul>
4	Installation of photovoltaic power generation equipment at metropolitan public housing projects	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	658	<ul> <li>✓ Increase use of renewable energy (annual total) 847,044kWh</li> </ul>

		Tokyo Green Bond	Amount to be	
No	Project	Environmental Category	appropriated	Expected environmental impact
		(See attachment)	(millions of yen)	
5	Environmental	1.Realization of Zero Emissions	448	✓ Increase use of renewable
	improvements at	through Energy Decarbonization		energy
	metropolitan schools	and the Sustainable Use of		(annual total) 951,679 kWh
	(promotion of zero-	Resources		✓ Reduce energy consumption
	emissions initiatives)			(annual total)
				2,794,440 kWh
6	Storage battery installation	1.Realization of Zero Emissions	38	✓ Storage capacity 500 kW (by
	projects for the use of	through Energy Decarbonization		the end of FY2024)
	renewable energy sources	and the Sustainable Use of		
		Resources		
7	Development of cycling	1.Realization of Zero Emissions	95	✓ Develop and extend length
	routes and areas	through Energy Decarbonization		- Cycling routes 11.5 km
		and the Sustainable Use of		(by the end of FY2024)
		Resources		<ul> <li>Cycling areas 50.7 km</li> </ul>
				(by the end of FY2030)
8	Development of parks	2. Realization of a Prosperous	3,200	✓ Expand developed areas
		Society in Harmony with the		108,696 m <sup>2</sup>
		Environment that Continues to		
		Benefit from Biodiversity		
9	Greening along waterfronts	2. Realization of a Prosperous	262	✓ Expand developed areas
		Society in Harmony with the		5,615 m <sup>2</sup>
		Environment that Continues to		
		Benefit from Biodiversity		
10	Development of small and	1.Realization of Zero Emissions	11,500	✓ 68.5% completion of river
	medium-sized rivers	through Energy Decarbonization		development
		and the Sustainable Use of		✓ Capacity of regulating reservoir
		Resources		1,056,500 m <sup>3</sup>
				(by the end of FY2025)
11	Development of tidal wave	1.Realization of Zero Emissions	771	✓ Develop and extend length
	protection facilities	through Energy Decarbonization		– Levee
		and the Sustainable Use of		0.01 km
		Resources		

		Tokyo Green Bond	Amount to be	
No	Project	Environmental Category	appropriated	Expected environmental impact
		(See attachment)	(millions of yen)	
12	Development of sediment	1.Realization of Zero Emissions	1,000	✓ Number of facilities
	disaster countermeasure	through Energy Decarbonization		Sabo facilities: 53
	facilities and coastal	and the Sustainable Use of		Coastal conservation facilities:
	protection facilities	Resources		3
				Steep slope collapse
				countermeasures: 15
13	Development of Tokyo	1.Realization of Zero Emissions	2,610	✓ Expand development scale and
	port facilities and islands'	through Energy Decarbonization		number of facilities
	coastal protection facilities	and the Sustainable Use of		<ul> <li>Levee in Tokyo port area</li> </ul>
		Resources		60.4 km
				- Water gates in Tokyo port area
				15 facilities
				<ul> <li>Internal revetment in Tokyo</li> </ul>
				port area
				45.6 km
				- Drainage pump station in Tokyo
				port area
				4 facilities
				(by the end of FY2031)
				<ul> <li>Coastal protection facilities in</li> </ul>
				the Izu Islands
				0.4 km
				(by the end of FY2023)
14	Development of the marine	2. Realization of a Prosperous	41	✓ Expand developed areas
	park	Society in Harmony with the		Umi-no-Mori Park
	(Umi-no-Mori park)	Environment that Continues to		(Forest Creation Area)
	- <i>^</i>	Benefit from Biodiversity		58 ha
				(by the end of FY2024)

		Tokyo Green Bond	Amount to be		
No	Project	Environmental Category	appropriated	Exp	pected environmental impact
		(See attachment)	(millions of yen)		
15	Installation of charging	1.Realization of Zero Emissions	2	~	Number of charging devices
	infrastructure for zero-	through Energy Decarbonization			installed
	emission vehicle (ZEV)	and the Sustainable Use of			40
		Resources		~	CO2 emissions reduction rate,
					etc. by replacing conventional
					vehicles with ZEV in
					conjunction with the
					introduction of charging
					facilities
					CO <sub>2</sub> (carbon dioxide) 100%
					NO <sub>x</sub> (nitrogen oxides) 100%
16	Purchase of zero-emission	1.Realization of Zero Emissions	31	~	CO <sub>2</sub> emissions reduction rate,
	vehicles (ZEV)	through Energy Decarbonization			etc. by replacing conventional
		and the Sustainable Use of			vehicles with ZEV
		Resources		_	PHEV
					CO <sub>2</sub> (carbon dioxide) 20.1%
				-	EV Motorcycle
					NO <sub>x</sub> (nitrogen oxides) 100%
					CO (carbon monoxide) 100%
					HC (hydrocarbons) 100%
17	Promotion of ZEB within	1.Realization of Zero Emissions	245	~	Reduce energy consumption
	TMG-owned facilities	through Energy Decarbonization			547,227 kWh
		and the Sustainable Use of			(by the end of FY2026)
		Resources			
18	Use of environment	3.Realization of a Better Urban	2,100	~	Reduction of the emission of
	friendly metropolitan buses	Environment that Ensures the			regulated substances
		Safety and Health of Tokyo		-	NO <sub>x</sub> (nitrogen oxides) 80%
		Residents			PM (particulate matter) 63%

No	Project	Tokyo Green Bond Environmental Category (See attachment)	Amount to be appropriated (millions of yen)	Expected environmental impact
19	Energy conservation within water facilities	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	794	<ul> <li>✓ Amount of electricity generated (including electricity sold)</li> <li>497,844kWh (by the end of FY2024)</li> <li>✓ Reduce energy consumption (annual total) 1,376,094kWh</li> </ul>
20	Energy conservation and global warming prevention within sewage facilities	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	2,300	<ul> <li>✓ Reduce GHG emissions</li> <li>(capacity) 33,000 t-CO₂/5 years</li> <li>(by the end of FY2025)</li> </ul>
21	Improvement of centralized sewerage system	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	700	<ul> <li>✓ Capacity of storage facility</li> <li>1.75 million m<sup>3</sup></li> <li>(by the end of FY2025)</li> </ul>
22	Flood countermeasures	1.Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	1,000	<ul> <li>✓ Drainage system flooding caused by 50 mm/h rain avoidance rate 73% (by the end of FY2025)</li> </ul>
		Total	41,310	

Appendix: Tokyo Green Bond Environmental Categories

Inquiries

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Appendix

## Tokyo Green Bond Environmental Categories

Below are the environmental categories from the Tokyo Environmental Master Plan (September 2022), example Tokyo Green Bond target projects, and expected environmental impacts.

No.	Environmental	Example projects	Expected Environmental Impact
	Category		
1	Realization of Zero Emissions through Energy Decarbonization and the Sustainable Use of Resources	<ul> <li>Reduce the greenhouse gas emissions of office buildings</li> <li>Promote energy conservation and management</li> <li>Promote the use of zero emission vehicles</li> <li>Promote advanced transportation technology and the use of bicycles</li> <li>Increase the utilization of renewable energy sources such as solar, geothermal, hydrogen, sewerage heat, etc.</li> <li>Reduce resource loss and increase the use of environmentally friendly materials</li> <li>The 3 Rs (reduce, reuse and recycle), Promote the recyclable use of waste</li> <li>Increase the utilization of materials that reduce environmental burdens</li> <li>Measures to counteract rising temperatures in urban areas</li> <li>Measures addressing floods and natural disasters</li> <li>Road improvement (heat insulation and water absorption)</li> <li>Improve water quality and conserve groundwater</li> </ul>	<ul> <li>Reduce CO<sub>2</sub> emissions</li> <li>Reduce energy consumption</li> <li>Increase renewable energy use</li> <li>Reduce amount of waste</li> <li>Increase amount of recyclable waste</li> <li>Improve adaptability to rising temperatures</li> <li>Improve adaptability to natural disasters such as floods, tsunamis, etc.</li> <li>Improve heat insulation and water absorption</li> <li>Improve water quality</li> </ul>
2	Realization of a Prosperous Society in Harmony with the Environment that Continues to Benefit from Biodiversity	<ul> <li>Plant and protect plants through the development of parks, street trees, forests, etc.</li> <li>Conserve biological diversity (Develop tidelands in marine parks, etc.)</li> </ul>	<ul> <li>Expand green areas</li> <li>Expand developed areas</li> </ul>
3	Realization of a Better Urban	<ul> <li>Improve air quality</li> <li>Promote measures to prevent/remediate soil contamination</li> </ul>	<ul> <li>Improve air/soil quality</li> <li>Reduce CO<sub>2</sub> emissions</li> <li>Increase amount of</li> </ul>

No.	Environmental	Example projects	Expected Environmental Impact
	Category		
	Environment that	Promote the treatment of hazardous waste	recyclable waste
	Ensures the		
	Safety and		
	Health of Tokyo		
	Residents		