

ASSESSMENT

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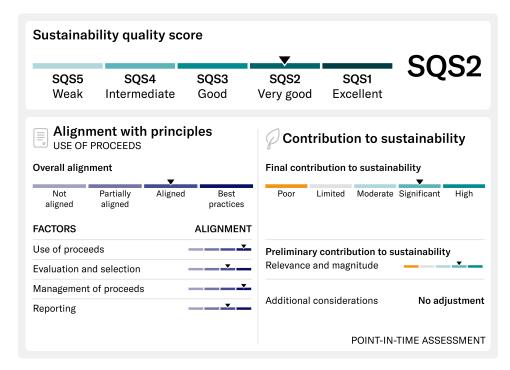
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Tokyo Metropolitan Government

Second Party Opinion – Resilience Bonds Framework Assigned SQS2 Sustainability Quality Score

Summary

We have assigned an SQS2 sustainability quality score (very good) to the Tokyo Metropolitan Government's ('TMG' or 'issuer') Resilience Bonds Framework dated October 2025. The issuer has established its use-of-proceeds framework to finance projects across one green category and one category with combined social and environmental objectives. The framework is aligned with the four core components of the International Capital Market Association's (ICMA) Green Bond Principles (GBP) 2025, Social Bond Principles (SBP) 2025, and Sustainability Bond Guidelines (SBG) 2021. The framework demonstrates a significant overall contribution to sustainability.



Scope

We have provided a Second Party Opinion (SPO) on the sustainability credentials of TMG's resilience bonds framework, including the framework's alignment with the ICMA's GBP 2025, SBP 2025, and SBG 2021. Under its framework, the issuer plans to issue bonds to finance projects across one green category and one category with combined social and environmental objectives, as outlined in Appendix 2 of this report.

Our assessment is based on the last updated version of the framework received in October 2025, and our opinion reflects our point-in-time assessment¹ of the details contained in this version of the framework, as well as other public and non-public information provided by the company.

We produced this SPO based on our Assessment Framework: Second Party Opinions on Sustainable Debt, published in March 2025.

Issuer profile

The Tokyo Metropolitan Government (TMG) is the administrative body of the Tokyo metropolis, the capital of Japan. As of January 2025, the population of Tokyo was estimated at 14.002 million, accounting for approximately 11% of Japan's total population, which is the largest among the entire 47 prefectures. Despite covering only 0.6% of Japan, Tokyo is the most densely populated prefecture in the country, with a population density of 6,399 person per square kilometer².

Tokyo is subject to severe typhoons and other natural disasters that could become more frequent and severe as a consequence of climate change. Situated in a coastal region, the city is highly vulnerable to sea-level rise and storm surges and is already experiencing more frequent and intense typhoons, which often cause flooding that lead to considerable physical damage. The extensive network of rivers in and around Tokyo also increases the risk of riverine flooding, particularly during extreme weather events. Tokyo is also exposed to the risk of earthquakes, where damaged infrastructure from seismic events can exacerbate flooding and complicate recovery efforts following typhoons or other extreme weather events. In addition to these immediate threats, Tokyo's resilience is also challenged by its aging infrastructure, high population density, and aging demographics. While Tokyo already possesses well-established expertise in disaster risk reduction and management, addressing increasing physical climate risks requires comprehensive, long-term strategies to increase the overall resilience of the metropolis, thereby safeguarding its residents and infrastructure.

Strengths

- » Eligible projects will substantially enhance the resilience of Tokyo's public infrastructure and reduce vulnerability to natural disaster risks, such as flooding, earthquakes and typhoons, thereby safeguarding the city's critical systems and improving the overall safety of residents.
- » Eligible projects are clearly defined and details of projects that will be financed in the current fiscal year are disclosed in the framework.
- » The expected E&S benefits are measurable and have been estimated ex-ante.
- » Well-established project evaluation and selection process, including clearly defined roles and responsibilities of relevant departments.

Challenges

» Eligible projects that involve large-scale construction projects could lead to negative E&S externalities, but they are not subject to a separate environmental and social impact assessment (ESIA). Nonetheless, such externalities are mitigated to some extent by TMG's adherence to relevant environmental laws and regulations.

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Alignment with principles

TMG's framework is aligned with the four core components of the ICMA's GBP 2025, SBP 2025, and SBG 2021:

Green Bond Principles (GBP)
 Green Loan Principles (GLP)
 Social Bond Principles (SBP)
 Sustainability-Linked Bond Principles (SLBP)
 Sustainability Linked Loan Principles (SLLP)

Use of proceeds

Not aligned	Partially aligned	Aligned	Best practices

Clarity of the eligible categories - BEST PRACTICES

TMG has clearly defined and communicated the nature of the expenditures, and the details of the eligible projects for each eligible category. Eligible projects will be located in Tokyo prefecture. While the eligible categories are broadly defined in the framework, project selection will be made from the TOKYO Resilience Project, where the project details are clearly specified. TMG determines the eligible projects to be financed at the beginning of each fiscal year, which are disclosed in the framework in the form of an appendix. We have received details of the eligible projects to be financed in the fiscal year that ends March 2026 (fiscal 2025) as the basis of our analysis.

Clarity of the environmental or social objectives – BEST PRACTICES

Relevant and coherent environmental and social (E&S) objectives are defined for all eligible categories and are clearly stated in the framework. All the eligible categories are relevant to the respective E&S objectives to which they aim to contribute. TMG has also referenced the United Nations' (UN) Sustainable Development Goals (SDGs) in articulating the objectives of the eligible categories, and the objectives are coherent with these recognized international standards (see Appendix 2).

Clarity of expected benefits - BEST PRACTICES

TMG has identified clear expected E&S benefits for all eligible categories. In line with the framework's overarching focus on resilience, the objective for green categories is climate change adaptation, and for social categories, access to essential services and affordable basic infrastructure. While the expected impact indicators are defined at the output level, they represent immediate measurable results that contribute to relevant expected E&S benefits. The indicators are considered appropriate for climate change adaptation projects, and TMG has identified the specific climate hazards that the projects aim to address, thereby enhancing resilience. Furthermore, TMG will be estimating these benefits ex-ante for all eligible categories, which will be disclosed on TMG's website prior to bond issuance. The framework states that all of the proceeds will be applied to new expenditures and will not be used to refinance existing expenditures.

Process for project evaluation and selection



Transparency and clarity of the process for defining and monitoring eligible projects – ALIGNED

TMG's decision-making process for the selection and evaluation of projects is clearly defined. The Bureau of Finance will be responsible for coordinating with other relevant bureaus and selecting eligible projects. The Bureau of Finance will reach out to other relevant bureaus to list potential eligible projects, which will then be assessed by the Bureau of Finance based on the content of eligible projects, TMG's own internal ESG criteria, and measures taken to mitigate the E&S risks associated with the projects. The Bureau of Environment will be involved in confirming the list of eligible projects from an environmental perspective. The decision-making process will also be documented internally for traceability.

TMG is committed to ensuring that eligible projects are properly executed, and that E&S risks are appropriately monitored and managed. TMG will evaluate each project's eligibility against the environmental, social and governance factors listed in its evaluation and selection chart, which is disclosed in the framework. Monitoring will be conducted more than once during the fiscal year following the bond issuance year, but not throughout the lifetime of the bond. This is because the proceeds will be fully allocated within the same fiscal year as the year of bond issuance. In case of noncompliance, the Bureau of Finance will implement remediation measures as appropriate with the relevant bureaus.

Management of proceeds



Allocation and tracking of proceeds - BEST PRACTICES

TMG has defined a clear process for the management and allocation of net proceeds from its issuances in its publicly available framework. Net proceeds raised under the framework will be placed in the issuer's general treasury account, and will be earmarked to ensure an equal amount is used only for eligible projects according to the issuer's internal account management rule. The tracked proceeds will be adjusted at the end of the fiscal year in line with the Local Autonomy Act, which stipulates that the settlement of accounts must take place annually. Therefore, the proceeds will be fully allocated within the same fiscal year as the bond issuance, and thus, the allocation period will be less than 24 months.

TMG has communicated that unallocated proceeds will be managed following TMG's public money management policy, which is publicly available and specifies the types of temporary placement of unallocated proceeds. If a project is postponed, canceled or becomes ineligible, the proceeds will be allocated to other eligible projects. The issuer has not made a clear commitment to not invest temporarily unallocated proceeds in GHG-intensive or controversial activities, though this is highly unlikely due to the relatively short allocation period of within one fiscal year, as stated in the framework.

Reporting



Transparency of reporting - ALIGNED

TMG will report on an annual basis until the full allocation of proceeds and in case of significant developments. The report will be publicly available on the issuer's website. The reported indicators are considered to be exhaustive, and include the name of eligible projects, associated environmental or social benefits, and the allocated amount.

TMG has identified relevant impact reporting indicators for all categories. The key underlying methodology and assumptions used in quantifying the environmental and social impacts are considered to be disclosed in the framework as the reporting metrics involve straightforward calculations. All revenue and expenditure details, including those associated with eligible projects, will be subject to a review from commissioners from TMG's Secretariat to Audit and Inspection Commissioners, who are independent from the governor. However, the issuer does not commit to obtain such an audit in case of material changes and on the reported environmental and social benefits. TMG commits to obtain a verification of its allocation and impact reports, which is stated in its framework.

Contribution to sustainability

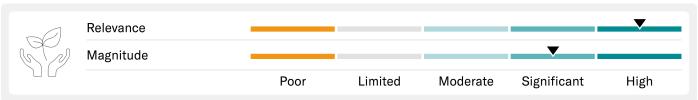
The framework demonstrates a significant overall contribution to sustainability. This reflects a preliminary contribution to sustainability score of significant, based on the relevance and magnitude of the eligible categories, and we have not made an adjustment to the preliminary score based on additional contribution to sustainability considerations.



Preliminary contribution to sustainability

The preliminary contribution to sustainability is significant, based on the relevance and magnitude of the eligible categories. Based on information provided by TMG, we expect a relatively higher share of proceeds from forthcoming issuances to be allocated to the 'To prevent flooding caused by heavy rain, and storm surges, and other related hazards to the greatest extent possible' category. A detailed assessment by eligible category has been provided below.

To prevent flooding caused by heavy rain, and storm surges, and other related hazards to the greatest extent possible (Climate change adaptation)

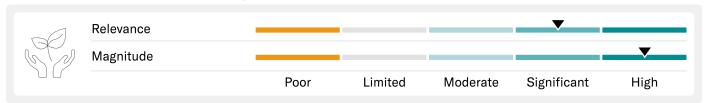


The category comprises three eligible green subcategories aiming to address climate change adaptation: upgrading small and medium-sized rivers to enhance flood resilience, developing and upgrading coastal protection facilities for the Port of Tokyo and remote islands, and reinforcing river facilities to strengthen water and seismic resilience.

The relevance of this category is high. Tokyo is a densely populated city particularly vulnerable to flood damage due to the increasing intensity of heavy rainfalls and storm surges exacerbated by climate change. According to the Japan Meteorological Agency, in Japan, the annual frequency of heavy rainfall events exceeding 50mm per hour has increased by 1.5 times since the 1970s and a trend of average sea level rise has been observed since the 1980s². As these trends are likely to continue and accelerate, Tokyo is increasingly susceptible to urban flooding especially since approximately 20% of the area of Tokyo's 23 special wards falls under below the sea level at high tide also known as the zero-meter zones⁴. Maximizing preventative measures for storm surges and related coastal hazards, including constructing and strengthening flood defense measures such as dikes, breakwaters, and floodgates, is therefore highly relevant as part of TMG's resilience efforts to protect the city from increasing flood damage risks.

The magnitude of this category is significant. The eligible projects involve proven technologies that are widely implemented primary flood defense measures, and are likely to have a lasting positive impact by enhancing the resilience of Tokyo's infrastructure against storm surge risks and related coastal hazards. However, the category involves medium-to-large scale construction work for dikes, water retention basin underground, floodgates, and other flood defense infrastructure, which are expected to receive the majority of proceeds within this category and are not subject to a separate environmental impact assessment. The E&S externalities are mitigated to a certain extent given the projects will be subject to relevant environmental laws and regulations including ground subsidence inspections, noise regulation act, and guidelines on recycling of construction materials, among others. While eligible river-related projects may inevitably affect local ecosystems and alter natural water flows due to large-scale construction, the maintenance plans for these projects will take into consideration their potential impact on biodiversity.

To prevent damage from strong winds and heavy rain caused by typhoons and other severe storms (Climate change adaptation, Affordable basic infrastructure, Access to essential services)



The category comprises two eligible green subcategories aiming to address climate change adaptation (undergrounding utility poles to prevent collapse in the event of disaster, developing and upgrading sediment disaster prevention and coastal protection facilities) and one eligible social category targeting affordable basic infrastructure and access to essential services (renovating port facilities to protect remote islands vulnerable to typhoons and coastal hazards).

In the past decade, Tokyo has experienced several major typhoons such as Typhoon Faxai and Typhoon Hagibis that have led to significant physical damage and economic loss. Climate projections from the Ministry of Environment suggest that the tropical cyclones intensity around Japan may increase in the future, which may translate to greater physical damage due to stronger winds and heavier rainfalls⁵. The eligible projects align with TMG's vision for a more resilient Tokyo by 2040 and contribute to significantly mitigating physical damage during severe storm events. Undergrounding utility poles is relevant to reducing impact in the event of natural disasters by contributing to smooth evacuation, providing emergency actions, and enabling subsequent recovery activities. Additionally, developing and upgrading sediment disaster prevention and coastal protection facilities will substantially reduce damage from landslides and debris flows during flooding. However, the relevance of these projects is not high because there are more direct adaptation measures, such as structural retrofitting of buildings for typhoon resistance and flood barriers, which directly mitigate the primary impact of natural disasters. Furthermore, the likelihood of landslides or volcanic eruptions, targeted by the sediment disaster prevention projects, is lower compared to other natural disaster risks considered in this framework.

The overall magnitude of this category is high, primarily driven by the utility poles undergrounding sub-category, which accounts for the majority of proceeds allocation. All three sub-categories are expected to lead to structural positive impact in reducing physical damage risks during severe storms. Undergrounding utility poles is an effective measure for mitigating secondary disaster risks, particularly the dangers posed by collapsing poles that can lead to power and network outages and increase fire hazards. These projects focus on emergency transportation routes and areas surrounding airports and ports, which are more vulnerable to damages and could impede critical evacuation and rescue operations. Additionally, the construction of 'sabo' dams and retaining walls to prevent sediment disasters, along with offshore breakwaters to mitigate storm surge damage, represents structural measures with proven efficacy. However, the involvement of medium-to-large scale construction activities raises concerns around potential negative environmental externalities given these projects will not undergo independent ESIAs. Nonetheless, these risks are mitigated to some extent as the projects will comply with relevant environmental laws and regulations. Notably, the erosion control projects will employ methods such as the non-frame method, where the surrounding trees are kept intact, and will be carried out in a planned manner, taking into consideration the importance of conservation targets and risk of disaster occurrence, in line with requirements stipulated in the national River Erosion Control Technical Standard⁶.

For port renovation projects, TMG plans to strengthen the resilience of port facilities, such as quays, on Tokyo's outlying islands to improve their safety against strong winds and waves. The target population is clearly identified as local residents who rely on these port facilities. Given the limited infrastructure on these islands, existing facilities require ongoing maintenance to prevent obsolescence. Port facilities are inherently exposed to strong winds, waves, and potential storm surges, posing risks to resident safety and the continuity of essential services during adverse weather conditions. Regarding affordability, port maintenance activities are generally funded by government bodies or public entities, ensuring that maintenance costs are not directly passed on to users. However, port management bodies may collect reasonable fees for using facilities, as outlined in the "Port-related fees under the jurisdiction of the Tokyo Metropolitan Government²" pricing table.

Additional contribution to sustainability considerations

We have not made an adjustment to the preliminary contribution to sustainability score based on additional considerations.

TMG has a robust due diligence process to identify and manage E&S risks associated with the financed projects. TMG's eligible projects will be subject to relevant environmental laws and regulations, such as those related to soil contamination and noise regulation act. In addition, where relevant, eligible projects will be subject to ground subsidence inspection to mitigate E&S risks associated with construction activities. During its project selection and evaluation process, TMG will consider procuring environmentally friendly materials and implement measures related to environmentally hazardous substances, waste management, and occupational safety. For the continued maintenance of infrastructure included in the eligible project categories, TMG develops comprehensive maintenance plans that will be subject to public consultation with key stakeholders to ensure transparency of the projects and the associated ESG risks.

The framework is coherent with TMG's overall sustainability strategy. The eligible categories in the framework align with TMG's Environmental Master Plan and Tokyo Resilience Project. Eligible green projects will comply with the "Promotion of climate change adaptation measures" set forth in the Tokyo Metropolitan Government's Basic Environmental Plan (September 2022), while eligible social projects will have clear social benefits for target populations in need of support due to the impact of climate change. As Tokyo faces increasing natural disaster risks due to climate change, TMG launched the 'Tokyo Resilience Project' in December 2022 to set out disaster preparedness countermeasures for a more resilient Tokyo by 2040⁸. The initiative identifies storm and flood, major earthquake, ash from volcanic eruption, disruption of power supply and communication services, and spread of a new infectious disease as the five major disaster risks faced by the city. This aligns with TMG's new long-term strategy 'Tokyo 2050 Strategy: Unlocking a Better Future' published in March 2025, in which TMG envisions Tokyo as a "Safe City" that is resilient and sustainable⁹.

Appendix 1 - Alignment with principles scorecard for TMG's framework

Factor	Sub-factor	Component	Component score	Sub-factor score	Factor score
Use of proceeds	Clarity of the	Nature of expenditure	А	Best practices	Best practices
		Definition of content, eligibility and exclusion criteria for nearly all categories	Α		
	eligible categories	Location	Α		
		BP: Definition of content, eligibility and exclusion criteria for all categories	Yes		
	Clarity of the objectives	Relevance of objectives to project categories for nearly all categories	Α	Best practices	
		Coherence of project category objectives with standards for nearly all categories	А		
		BP: Objectives are defined, relevant and coherent for all categories	Yes		
		Identification and relevance of expected benefits for nearly all categories	Α		
		Measurability of expected benefits for nearly all categories	А		
	Clarity of expected	BP: Relevant benefits are identified for all categories	Yes	Best	
	benefits	BP: Benefits are measurable for all categories	Yes	practices	
		BP: Disclosure of refinancing prior to issuance and in post-allocation reporting	Yes		
		BP: Commitment to communicate refinancing look-back period prior to issuance	Yes		
	Transparency and	Clarity of the process	Α		Aligned
Process for	clarity of the process for defining and monitoring eligible projects	Disclosure of the process	Α	- Aligned	
project evaluation and selection		Transparency of the environmental and social risk mitigation process	Α		
		BP: Monitoring of continued project compliance	No		
	Allocation and tracking of proceeds	Tracking of proceeds	Α	Best practices	Best practices
Management of t		Periodic adjustment of proceeds to match allocations	А		
		Disclosure of the intended types of temporary placements of unallocated proceeds	Α		
		BP: Disclosure of the proceeds management process	Yes		
		BP: Allocation period is 24 months or less	Yes		
	Reporting transparency	Reporting frequency	Α	- - Aligned	Aligned
		Reporting duration	Α		
Reporting		Report disclosure	Α		
		Reporting exhaustivity	Α		
		BP: Allocation reporting at least until full allocation of proceeds, and impact reporting until full bond maturity or loan payback	No		
		BP: Clarity and relevance of the indicators on the sustainability benefits	Yes		
		BP: Disclosure of reporting methodology and calculation assumptions	Yes		
		BP: Independent external auditor, or other third party, to verify the tracking and allocation of funds	Yes		
		BP: Independent impact assessment on environmental and social benefits	Yes		

Legend: BP - Best practice, A - Aligned, PA - Partially aligned, NA - Not aligned

Appendix 2 - Mapping eligible categories to the United Nations' Sustainable Development Goals

The 2 eligible categories included in TMG's framework are likely to contribute to 3 of the United Nations' Sustainable Development Goals (SDGs), namely:

UN SDG 17 Goals		SDG Targets
GOAL 9: Industry, Innovation and Infrastructure	To prevent damage from strong winds and heavy rain caused by typhoons and other severe storms	9.1: Develop sustainable infrastructure to support economic development and human well-being, focusing on equitable access
GOAL 11: Sustainable Cities and Communities	To prevent flooding caused by heavy rain, and storm surges, and other related hazards to the greatest extent possible	11.5: Reduce deaths, people affected and economic losses caused by disasters, particularly for people in vulnerable situations
	To prevent damage from strong winds and heavy rain caused by typhoons and other severe storms	
GOAL 13: Climate Action	To prevent flooding caused by heavy rain, and storm surges, and other related hazards to the greatest extent possible	13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
	To prevent damage from strong winds and heavy rain caused by typhoons and other severe storms	13.2: Integrate climate change measures into national policies, strategies and planning

The United Nations' Sustainable Development Goals (SDGs) mapping in this SPO considers the eligible project categories and associated sustainability objectives/benefits documented in the issuer's financing framework, as well as resources and guidelines from public institutions, such as the ICMA SDG Mapping Guidance and the UN SDG targets and indicators.

Appendix 3 - Summary of eligible categories in TMG's framework

Eligible Categories	Description	Sustainability Objectives	Impact Reporting Metrics
To prevent flooding caused by heavy rain, and storm surges, and other related hazards to the greatest extent possible	Upgrading small and medium-sized rivers to enhance flood resilience	Climate change adaptation	Completion of river development (%) Storage capacity of regulating reservoirs (m³)
	Developing and upgrading coastal protection facilities for the Port of Tokyo and remote islands	Climate change adaptation	Length completed (km) Number of structures developed
	Reinforcing river facilities to strengthen water and seismic resilience	Climate change adaptation	Length completed (km)
To prevent damage from strong winds and heavy rair caused by typhoons and other severe storms	Undergrounding utility poles to prevent collapse in the event of a disaster	Climate change adaptation	Length completed (km) Number of airports upgraded Number of ports upgraded
	Developing and upgrading sediment disaster prevention and coastal protection facilities	Climate change adaptation	Number of structures developed/upgraded
	Renovating port facilities to protect remote islands vulnerable to typhoons and coastal hazards	Access to essential services Target population: Local residents and others who use port facilities	Number of ports upgraded

Endnotes

- 1 Point-in-time assessment is applicable only on date of assignment or update.
- 2 Households and Population of Tokyo by District and Age Based on the Basic Resident Registry, Tokyo Metropolitan Government, accessed in July 2025.
- 3 Climate Change Monitoring Report 2023, Japan Meteorological Agency, accessed in July 2025.
- 4 The Front Line of the Ocean, Protecting Tokyo Against Flood Damage, TMG's Tokyo Updates, accessed in July 2025.
- 5 Climate Change Impact Assessment Report, Ministry of Environment, accessed in July 2025
- 6 River Erosion Control Technical Standards; Ministry of Land, Infrastructure, Transport and Tourism; accessed in July 2025.
- 7 Tokyo Port Port Charges 2025, Bureau of Port and Harbour, accessed in July 2025.
- 8 TOKYO Resilience Project, Tokyo Metropolitan Government, accessed in July 2025.
- 9 Tokyo 2050 Strategy, Tokyo Metropolitan Government, accessed in July 2025.

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