Green Bonds Issuance Policy

February 2017

Tokyo Metropolitan Government

The Issuance of Green Bonds

Economic development since the industrial revolution has enriched people's standards of living in a variety of ways. Meanwhile, issues that threaten people's livelihoods, such as environmental issues, etc. are arising and the world is currently facing significant economic, social, and environmental risks.

In order to deal with these issues, in addition to issues such as poverty eradication, etc. covered in hitherto Millennium Development Goals (MDGs), the "Sustainable Development Goals (SDGs)", which clearly outline global scale priority issues to be addressed by 2030, including the economy, society and the environment, and how the world should be by then, were adopted in United Nations Summit in September 2015.

In December 2015, COP21 was held in France and the "Paris Agreement", comprising a new framework for climate change measures after 2020, was adopted with all nations agreeing to participate from a shared sense of impending crisis concerning the threat of climate change. The agreement entered into force in November 2016.

Given this situation, the TMG drafted the "Action Plan for 2020" in December 2016 as a plan that indicates specific policy deployment by the metropolitan government in its bid to create a new Tokyo of the future that realizes a safe, secure and healthy "Safe City", a city of "Diversity" where all people can participate with vitality, and a "Smart City, that will continue to grow as a leading environmental city and as an international finance/ economic powerhouse.

In environmental terms, the TMG drafted the Tokyo Environmental Master Plan in March 2016, set goals such as the reduction of greenhouse gas emissions by 30% to 2000 levels by 2030, etc., and is promoting measures based on this master plan.

With this trend of growing importance attached to approaches that consider the environment, recent years have seen an increase in the issuance of Green Bonds for the procurement of funds required for environmental projects undertaken by companies and local governments, etc. overseas, and there is a growing demand for green investment.

In order to tackle resolutions to environmental issues that have become shared issues in the international community, the TMG must assertively deploy environmental measures and undertake measures to create flow for the expansion and invigoration of the domestic Green Bonds market.

1 The significance of Green Bonds issuance

The TMG will issue Green Bonds in FY2017. The significance of this issuance is as follows.

- Assertive promotion of new environmental measures in addition to environmental measures currently implemented by the TMG for the realization of a smart city, through additional support derived from investment in Green Bonds by Tokyo residents and enterprises.
- 2 Creation of a flow that aims to utilize valuable domestic funds for domestic environmental measures, as well as invigorating the Green Bonds market and promoting participation by other issuing bodies, through the issuance of the first Green Bonds to be issued by a local government in Japan.
- 3 Awakening a sense of ownership among Tokyo residents through their understanding of the TMG's environmental projects, by offering private investors investment opportunities for proactive involvement in such projects.
- 4 Contributing to the cultivation of corporate environmental consideration and awareness, and promoting the development of socially appraised environments , by offering institutional investors investment opportunities that will allow them to fulfil their social responsibilities.
- (5) Diversification of the investor base through the issuance of TMG Bonds as Green Bonds, which will allow the TMG to access to new investors as an issuing body.

2 From trial bonds to Green Bonds

Tokyo Environmental Supporter Bonds, which are a trial version of Green Bonds, were the first step in the approach to create a flow that aims to utilize valuable domestic funds for domestic environmental measures by offering early opportunities for proactive involvement in the TMG's environmental projects. These bonds were issued in FY2016. From the perspective of early offering, this trial complied with the following.

- While transparency required by the Green Bond Principles was ensured through voluntary compliance with all four core components of the Green Bond Principles, verification by a third-party institution, etc. was not obtained.
- Regarding allocated projects, the target were limited to the portion of the projects for the relevant fiscal year, and issuance was in accordance with the scale of project build-up.
- TMG bonds for private investors were issued in order to heighten the movement towards environmental investment as quickly as possible.

The sale of these bonds progressed smoothly, with bonds selling out on the first day of sale. In addition, the results of a questionnaire survey conducted in relation to purchasers showed that over 70% empathized with the significance of the issuance, and where use of proceeds was concerned, there was a desire for funds to be allocated to a wide range of projects.

In view of these results, the issuance of Green Bonds in FY2017 shall comply with the following.

- Verification by a third-party institution, etc. to ensure eligibility and transparency as Green Bonds and to heighten the appeal of the bonds to investors.
- Regarding allocated projects, in addition to projects selected for Tokyo Environmental Supporter Bonds, selection of new projects that are considered suitable green projects, etc. and expansion of issuance volume.
- Issuance for both private investors and institutional investors together with an increase in the issuance amount in order to offer investment opportunities to a wider range of investors.

3 Compliance with Green Bond Principles

Regarding compliance with the Green Bond Principles, as with the Tokyo Environment Supporter Bonds, Green Bonds shall comply with all four of the core components given below.

- 1 Use of Proceeds
- (2) Process for Project Evaluation and Selection
- (3) Management of Proceeds
- (4) Reporting

At this time, in order to ensure eligibility and transparency as Green Bonds and to heighten the appeal of the bonds to investors, verification by a third-party institution, etc. will be obtained. In addition, compliance with Green Bond Principles will be further enhanced by taking the results of the trial into consideration, and through verification by a third-party institution, etc. with regards to information communication methods, etc. that ease the transmission of information such as the significance of issuance and status of allocated projects to investors.

4 Name

The name of Green Bonds to be issued by the TMG will be "Tokyo Green Bonds".

5 Allocated projects and issuance volume

Regarding allocated projects of Green Bonds to be issued in FY2017, in addition to projects selected at the time of Tokyo Environmental Supporter Bonds issuance, the scope will be expanded to include projects of public enterprises, and projects that adopt an advanced and accelerated stance in promoting TMG environmental measures will be newly selected. Consequently, overall issuance volume will be about ¥20billion.

(Main projects scheduled for allocation)

Category	Project name	Green Bonds target project	
		Environmental Supporter Bonds target project	New target project
Environmental measures that take advantage of opportunities presented by the Tokyo 2020 Olympics	Environmental measures for venues of the Tokyo 2020 Olympics		0
	Heat shielding/water retentive surfacing for Tokyo's roads		0
Smart energy city development	Renovation/refurbishment of TMG owned facilities	0	
	Conversion of lighting in TMG owned facilities and roads to LED		0
	Promoting conversion of TMG owned facilities to ZEB.		0
	Energy-saving in water supply and sewerage facilities		0
	Introduction of environmentally friendly TMG operated buses		0
Cool/clean comfortable city development	Parks development	0	
	Improvements to combined sewerage pipes		0
	Advanced treatment at sewerage treatment plants		0
Adaptation to the effects of climate change	Medium and small size river development	0	
	Development of storm-surge defense facilities	0	

^{*} Acronym for Net Zero Energy Building. Buildings in which primary energy consumption is reduced through the use of improvements to energy-saving performance and renewable energy, etc. so that net annual energy consumption is zero or close to zero.

6 Target investors

Envisaged target investors are private investors such as Tokyo residents and institutional investors who are able to purchase yen-denominated bonds, and this will consequently contribute to the creation of a flow that aims to utilize valuable domestic funds for domestic environmental measures. In addition, together with the increase in issuance amount from ¥10billion in FY2016 to about ¥20billion in FY2017, TMG bonds will be issued separately for private investors and institutional investors. The issuance of TMG bonds for private investors will enable the continuous offering of investment opportunities for proactive involvement in environmental projects to Tokyo residents, while the issuance of new TMG bonds targeting institutional investors will offer companies, etc. investment opportunities that will allow them to fulfil their social responsibilities.

7 Denominated currency

Regarding denominated currency, TMG bonds for institutional investors will be yen-denominated, while denomination of TMG bonds for private investors will be determined in accordance with market conditions, etc. Opting for yen-denomination in relation to TMG bonds for institutional investors will promote the flow that aims to utilize valuable domestic funds for domestic environmental measures. In addition, regarding TMG bonds for private investors, denomination will be determined in accordance with market conditions, etc. as target purchasers will be limited to Tokyo residents, etc. and domestic funds will be utilized for domestic environmental measures, regardless of whether such bonds are yen-denominated or foreign currency denominated.

8 Issuance period

The issuance period will be from October to December, and together with the acquisition of opinions, etc. from selected third-parties, projects for Green Bonds allocation will be selected while confirming the progress status of projects for the relevant fiscal year.

^{*}The issuance of TMG Bonds for FY2017 will be enabled upon approval of the FY2017 Tokyo Metropolitan Draft Budget by the Tokyo Metropolitan Assembly.

[Reference] Overview of Green Bond Issuance Policy

	FY2017	[Reference] FY2016	
Name	- Tokyo Green Bonds	- Tokyo Environmental Supporter Bonds	
Issuance volume	- About ¥20billion	- AUD \$125million (equivalent to ¥10billion)	
Target investors	Institutional investors who are able to purchase yen-denominated bonds Private investors such as Tokyo residents, etc.	- Private investors such as Tokyo residents, etc.	
Denominated currency	- For institutional investors: Yen-denominated - For private investors: Determined according to market conditions, etc.	- AUD	
Issuance period	- October - December	- December	
Compliance with Green Bond Principles	Verification by a third-party, etc.Further enhancement of compliance with principles	No verification by a third-party, etc. Voluntary compliance with principles	
Allocated projects	Projects selected for Tokyo Environmental Supporter Bonds Public enterprise projects Projects that contribute to the advancement of environmental measures Environmental measures for the venues of the Tokyo 2020 Olympics Conversion of lighting in TMG owned facilities and roads to LED Promoting conversion of TMG owned facilities to ZEB	- Introduction of renewable energy, energy-saving - City greening - Adaptation to the effects of climate change etc.	