CIUDAD DE MÉXICO (CDMX) SUSTAINABILITY BOND FRAMEWORK

SECOND OPINION BY SUSTAINALYTICS

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SUSTAINALYTICS

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1. INTRODUCTION

Gobierno de la Ciudad de Mexico (Mexico City Government) has developed a Sustainability Bond Framework in accordance with which it intends to issue Sustainability Bonds that will fund social and environmental beneficial projects in Ciudad de México ("CDMX", "Mexico City", or "the City"). This Sustainability Bond Framework has been published in a separate document. The net proceeds of each sustainability bond will be used to refinance or finance, in whole or in part, existing (re-financing) and future projects that promote sustainable development and the transition to a low-carbon, climate-resilient economy. The Framework defines eligibility criteria in nine areas:

1. Essential Public Services;
2. Sustainable Transport;
3. Sustainable Buildings;
4. Renewable Energy;
5. Energy Efficiency;
6. Water Efficiency and Wastewater Management;
7. Pollution Prevention and Control;
8. Conservation and Biodiversity;
9. Climate Change Adaptation.

A list of eligible projects and projected allocations for the 2017 Sustainability Bond issuance is provided in Appendix 1.

Mexico City, engaged Sustainalytics to review the framework of the Sustainability Bond and provide a second-party opinion on the alignment of the Sustainability Bond with the Green Bond Principles 2017 (the "GBP") and Sustainability Bond Guidelines 2017, as administered by the International Capital Market Association (the "ICMA").[1]

As part of this engagement process, Sustainalytics referred to previous information gathered as part of the 2016 CDMX Green Bond[2] (for which Sustainalytics provided an opinion) and reviewed relevant public documents and non-public documents relating to the design, planning, governance and development of the CDMX Sustainability Bond Framework. This document contains Sustainalytics' opinion of the CDMX Sustainability Bond Framework and should be read in conjunction with that framework.

[1] ICMA's Green Bond Principles 2017:
https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/GreenBondsBrochure-JUNE2017.pdf
ICMA's Sustainability Bond Guidelines 2017:
https://www.icmagroup.org/assets/documents/Regulatory/Green-Bonds/SustainabilityBondGuidelines-JUNE2017.pdf

[2] Sustainalytics Second Party Opinion on CDMX Green Bond Framework:
http://www.sustainalytics.com///sites/default/files/green_bond_opinion_cdmx_11112016_final.pdf

2. SUSTAINALYTICS' OPINION

Section 1: Sustainalytics Opinion on the CDMX Sustainability Bond Framework

Overall, Sustainalytics is of the opinion that the CDMX Sustainability Bond Framework creates meaningful impact, is transparent, and aligns with the Green Bond Principles 2017 and the Sustainability Bond Guidelines 2017. Some considerations in Sustainalytics' assessment are listed below:

- All green eligibility criteria for the use of proceeds are recognized by the Green Bond Principles 2017 as project categories with clear environmental impact.
- The City's disclosure and processes with respect to management of proceeds and project selection process are in line with market practices.
- CDMX commits to targeting proceeds towards disadvantaged populations by selecting projects that are providing essential services to these populations. Since CDMX defines these populations in alignment with Ministry of Social Development, Sustainalytics is of the opinion that these definitions are credible.
- Projects or services under the Essential Public Services eligibility criteria are being developed in areas designated as medium, low, or very low on the Mexico City Social Development Index, which will ensure a targeted population.
    - The free admission interactive children's museum is being developed in the low-income area of Iztapalapa where 37.4% of inhabitants live in poverty. This is one of the highest poverty rates in Mexico City.
- Sustainalytics encourages CDMX where possible to report on quantitative KPIs relevant to project categories.

Alignment with Green Bond Principles 2017 / Sustainability Bond Guidelines 2017:
Sustainalytics has determined that the CDMX Sustainability Bond Framework aligns to the four pillars of the Green Bond Principles 2017 and the Sustainability Bond Guidelines 2017. For detailed information please refer to Appendix 5: Green Bond/Green Bond Programme External Review Form.

Section 2: Mexico City's Social and Environmental Commitments

Mexico City's Commitment to Social Development:

Sustainalytics has reviewed Mexico City's General Program for Development 2013-2018[3], which establishes the social objectives and actions for the City. Sustainalytics is of the opinion that the Sustainability Bond is aligned to Mexico City's social development commitments. The program has a vision to create a city of freedom, tolerance, diversity, fairness, inclusive, and safety. Accordingly, the program aims to promote equality of opportunity and gender equality, support vulnerable populations, create a safe city, and stimulate the economy. In order to achieve this vision, the program is structured around five pillars:

Pillar 1: Equity and Social Inclusion for Human Development;
Pillar 2: Good Governance, Safety and Citizen Protection;
Pillar 3: Sustainable Economic Development;
Pillar 4: Livability and Services, Public Space, Infrastructure;
Pillar 5: Effectiveness, Accountability, Fight Against Corruption.

Pillar 1 (Equity and Social Inclusion for Human Development) covers issues including exclusion, discrimination, health, education, access to cultural contents, spaces and services amongst others.

Pillar 4 (Livability and Services, Public Space, Infrastructure) covers issues including public space, public transportation, and water infrastructure. The program sees public space as an area of opportunity for culture and daily social interaction urban life and community identity expression.

Sustainalytics is of the opinion that social projects to be funded under the "Essential Public Services" eligibility criteria, which include a community center for the elderly, a childcare center, a children's museum and funding for the "HealthArt" (SaludArte in Spanish) program at schools, are aligned with Pillar 1 and Pillar 4.

Mexico City's Comprehensive Environmental Commitment and Targets:

Sustainalytics reviewed Mexico City's climate change strategy in November 2016 for its Green Bond issuance. Sustainalytics believes that the City's government is sustainability-focused and has a robust short- and long-term strategy to mitigate adverse environmental impacts. The strength of Mexico City's climate change strategy derives from: (i) strong local climate action plans, (ii) track record of performance on plans, (iii) participation in international forums to report to commitments and actions. Based on the above, Sustainalytics believes that Mexico City is well positioned to issue Sustainability Bonds.

[3] General Development Program of the Federal District 2013-2018:
https://data.finanzas.cdmx.gob.mx/documentos/ProgGralDesarrollo_2013_2018.pdf

Additionally, Mexico City has established targets to reduce CO_2e emissions by approximately 30% by 2020 relative to the baseline. The City tracks and reports on its targets through its CDP Survey Responses and publically reports on its Scope 1, 2 and 3 emissions. Sustainalytics is of the opinion that reporting on targets and performance on Mexico City's environmental strategies is indicative of the priority the City assigns to achieving results.

Please refer to Appendix 2 for a review of Sustainalytics' opinion of CDMX's Green Bond Framework published in November 2016.

Section 3: Opinion on the CDMX Use of Proceeds

Proceeds of the bond will be directed towards nine eligibility criteria:

1. Essential Public Services;
2. Sustainable Transport;
3. Sustainable Buildings;
4. Renewable Energy;
5. Energy Efficiency;
6. Water Efficiency and Wastewater Management;
7. Pollution Prevention and Control;
8. Conservation and Biodiversity;
9. Climate Change Adaptation.

Overall, Sustainalytics is of the opinion that the proceeds from the bond will have clear positive social and environmental impacts. Below, Sustainalytics has provided an opinion on projects under the newly included Essential Public Services eligibility criteria. Please refer to Appendix 3 for Sustainalytics' Opinion on Sustainable Buildings, Climate Change Adaptation, Sustainable Transport, and Water Efficiency and Wastewater Management.

The Importance of Improvements to Essential Public Services in Mexico City:
Essential public services are vital to establish and maintain the quality of life of citizens, ensure the health of citizens, and contribute to the economic and environmental well-being of a city. Essential services directly benefit low-income and marginalized communities and vulnerable population groups. Mexico City's current public service projects include the development of public spaces and development of projects that promote children's education.

Mexico City faces a lack of public spaces, as well as a problem of uneven distribution and connectivity of the existing public spaces. According to the 2013-2018 Development Program, the optimal ratio for public spaces is set at 12 m^2/hab whereas, as of 2013, public space was estimated

to represent 5 m^2/hab (or 9.5%) of the total area of the city.[4] Moreover, this space is not distributed equitably throughout the city and, in many cases, the existing spaces are inadequate with respect to accessibility, quality and maintenance. The 2013-2018 plan recognized the need to widen and strengthen these policies with particular attention to accessibility and targeting of vulnerable populations.

In line with this, proceeds from the 2017 Sustainability Bond may be used towards the development of a free-admission, interactive children's museum in the low-income area of Iztapalapa.[5] The 17,500m^2-building will create a large public space between the museum's ground floor and an adjacent public square. In addition to enhancing and extending existing public space in the City, the museum is expected to achieve a positive impact on the learning and recreation options for children in a low-income area of Mexico City. The interactive museum will replicate a successful museum established in Mexico City in order to support creativity and knowledge in science, technology, art, nature and environmental stewardship. Proceeds towards the interactive children's museum is in line with Pillar 1 and 4 of the 2013-2018 Mexico City Development Plan.

Mexico City may allocate proceeds to additional projects targeting children's education. Projects may include the refurbishment of 30 childcare centers from low-income households in the area of Itzacalco and 110 schools across the city with an objective to improve the learning and working conditions of the centers. Refurbishment may include reinforcement of the building structure, electric installations, sanitaries to improve the comfort, hygiene and safety of the building, and installation of drinking water-fountains.

Sustainalytics is of the opinion that the planned investments described above will benefit vulnerable and low-income communities.

[4] General Development Program of the Federal District 2013-2018: https://data.finanzas.cdmx.gob.mx/documentos/ProgGralDesarrollo_2013_2018.pdf

[5] According to CONEVAL, Iztapalapa is one of the three delegations in Mexico City presenting the highest proportion of poor people followed by Milpa Alta and Tláhuac.

Alignment with the Sustainable Development Goals (SDGs):

The Sustainable Development Goals (SDGs) were established in September 2015 and form an agenda for achieving sustainable development by the year 2030. These goals are widely considered to be the next step to the Millennium Development Goals (MDG), which were time-bound to 2015. The below table summarizes SDGs of particular importance for Mexico City under its Sustainability Bond Framework.

SDG	SDG Target	Use of Proceeds Category
SDG 4 – Quality Education	**4.1 -** By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes**.** **4.2 -** By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education. **4.7 -** By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development. **4.A -** Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.	1. Essential Public Services
SDG 6 – Clean Water and Sanitation	**6.1** - By 2030, achieve universal and equitable access to safe and affordable drinking water for all. **6.3** - By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.	6. Water Efficiency and Wastewater Management
SDG 7 – Affordable and Clean Energy	**7.2 -** By 2030, increase substantially the share of renewable energy in the global energy mix.	4. Renewable Energy
SDG 9 – Industry, Innovation and Infrastructure	**9.4 -** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.	5. Energy Efficiency 7. Pollution Prevention and Control
SDG 10 – Reduce Inequalities	**10.2** - By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.	1. Essential Public Services
SDG 11 – Sustainable Cities	**11.2 -** By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public	2. Sustainable Transport 3. Sustainable Buildings

	transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons. **11.C** - Support least developed countries, including through financial and technical assistance, in building sustainable and resilient buildings utilizing local materials	
SDG 12 – Responsible Consumption	**12.2** - By 2030, achieve the sustainable management and efficient use of natural resources. **12.5** - By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.	6. Water Efficiency and Wastewater Management 7. Pollution Prevention and Control
SDG 12 – Climate Change	**13.1** - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries **13.3** - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.	9. Climate Change Adaptation
SDG 15 – Life on Land	**15.2 -** By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded forests and substantially increase afforestation and reforestation globally.	8. Conservation and Biodiversity

Conclusion

Mexico City has a strong social and environmental commitment to promote equality of opportunity, targeting vulnerable populations, as well as to mitigate the impacts of climate change. The CDMX Sustainability Bond Framework and the City's Sustainability Bond issuances may also set a positive precedent for the promotion of sustainable infrastructure investment by public sector and state-owned enterprises in Mexico.

The CDMX Sustainability Bond Framework is in alignment with the four pillars of Green Bond Principles 2017 and the Sustainability Bond Guidelines 2017. The Framework defines strong eligibility criteria, demonstrates a structured and transparent project selection process that is supported by the Mexico City Finance Ministry, Mexico City Ministry of Environment, and other relevant ministeries and outlines clear and transparent processes for the management of proceeds and reporting on relevant social and environmental KPIs.

Based on the above considerations, Sustainalytics is of the view that Mexico City's Sustainability Bond is robust, credible and transparent.

APPENDICES

Appendix 1: CDMX Bono Sustentable 2017 – Use of Proceeds

CDMX has identified projects (new and existing) amounting to approximately MXN2432 million that could potentially receive allocations from its 2017 sustainability bond issuance. All are public works projects located in Mexico City.

Eligibility Criteria	Projects	Allocation (MXN mil)	Potential Impact Indicators
Essential Public Services	New: - Construction of a children's museum for experiential learning - Rehabilitation of childcare centers	452	Qualitative: - Descriptions of projects including the need for specific infrastructure investment in various localities Quantitative: - Number of children benefitted from projects targeting children's development and learning - Number of persons benefitted (vulnerable groups) from public services and infrastructure
	Refinancing: - Construction of a community center for the elderly - Rehabilitation of public schools participating in the SaludArte program (healthy meals and health education through art workshops)	99	
Sustainable Transport	New: Bus Rapid Transit (Metrobús) - Construction of the road corridor for Line 7	474	Qualitative: - Descriptions of projects and environmental and social impact assessments where available Quantitative: - Energy/fuel consumption and reduction (KWh/tons) - GHG emissions for city transport
	Refinancing: Mexico City Metro (STC) - Installation and repair of equipment that improves accessibility and comfort, especially for elderly passengers, and reduces passenger transit times. Trolleybus - Maintenance of trolleybuses Bus Rapid Transit (Metrobús) - Construction and maintenance of first stage of Line 5	994	

	- Construction of the road corridor for Line 6		
Water and Wastewater Management	New: - Construction, replacement and maintenance of water collection and drainage facilities - Construction of water treatment plants - Construction and maintenance of water, and storm-water pumps and reservoirs - Replacement and repair of drinking water wells and drinking water distribution lines	207	Qualitative: - Descriptions of projects including the need for specific infrastructure investment in various localities - Explanation of mechanisms for water and energy savings Quantitative: - Volume of water (m^3) leakage reduced - Volume of water (m^3) treated / recycled - Metrics on improvements in water quality e.g. Biochemical oxygen demand (BOD)
	Refinancing: - Rehabilitation and technology updates for water treatment plants - Replacement of drinking water distribution lines	125	
Energy Efficiency	New: Public Lighting - Installation, upgrades and maintenance of street lighting and lighting in city buildings to improve energy efficiency (LED bulb installation) and reduce need for new equipment/material	80	Qualitative: - Descriptions of projects including specifications of energy efficient equipment Quantitative: - Energy consumption and energy use reduction in city buildings (KWh)
Note: The above projects have been registered with the Mexican Ministry of Finance (SHCP) prior to issuance. Further details are available in offering documentation.	Total	2,432	Various Mexico City environmental and social development disclosures including CDP reports, disclosures under CDMX climate change and resilience strategies and social surveys and program evaluations

Appendix 2: Analysis of CDMX's Environmental Strategy for the 2016 Green Bond Framework

Mexico City's Comprehensive Environmental Commitment:

Mexico City has two local climate change focused commitments. The first is the Climate Action Local Strategy 2014-2020 ("ELAC" in Spanish), and the second is the Climate Action Program 2014-2020 ("PACCM" in Spanish)[6], which provide a broad strategy to combat climate change as well as corresponding action plans.

ELAC outlines a commitment to reduce the emissions of GHGs and to take advantage of the opportunities within the framework of the Kyoto Protocol, the Clean Development Mechanism and other global instruments under the United Nations Framework Convention on Climate Change (UNFCCC). In 2006, Mexico City drafted and became the first local authority in Mexico to develop such a document. The GHG mitigation strategies and actions outlined in ELAC and PACCM are disclosed in Appendix 2.

Strategic Priorities of the Climate Action Local Strategy (ELAC) and the corresponding Key Actions set by the Climate Action Program (PACCM).

Strategy	Action
1. Urban and Rural Energy Transition	Modernization actions and energy efficiency in the Public Transport System
	Electric power savings program in the operation of wells and pumping plants
2. Containment of Urban Sprawl	Creating a territorial planning program for Mexico City that integrates environmental and urban policies
	Program for the identification of underutilized premises or buildings and definition of the strategies for increased use and rehabilitation
	Increased green rehabilitation of intra-urban area
3. Environmental Improvement	Scrapping of microbuses and creation of corridors concession
	Implementation of new Metrobus corridors
	Implementation of schemes for intermodal mobility in strategic areas of the city
	Use of technologies to take advantage of the city's solid waste output
	Program of suppression of leakage and rehabilitation of pipes
4. Sustainable Management of Natural Resources and Biodiversity Preservation	Creation of the Law for the Protection, Preservation and Sustainable Use of Biodiversity in the Federal District
	Works for the conservation of soil and water in Preservation Areas
5. Building the City's Resilience	Update the Atlas of dangers and risks of the DF
	Hydro-meteorological risks prevention program
	Design of a climate change environmental fund for Mexico City
6. Education and Communication	Homologate climate change concepts for dissemination in information centers at museums
	Develop an environmental education catalog
7. Research and Development	Regulate freight transport (main source of black carbon)
	Improvement of adaptation indicators
	Creation of mitigation indicators

[6] Local Climate Action Strategy Local Climate Action Strategy Mexico City. Accessed on October 17, 2016: http://www.cger.nies.go.jp/gcp/pdf/a20060904/t4/sheinbaum.pdf

Mexico City also demonstrates a track record of delivering on its commitments. For the time period of 2014-2020, PACCM is designed specifically to be a planning tool that integrates, coordinates and promotes actions to reduce the environmental, social and economic risks posed by climate change through strategies contained in the ELAC. During the implementation of Mexico City's first Climate Action Program for the 2008-2012 period, 6 million tons of CO2e were mitigated, which represents a decrease of 4.5% over the baseline scenario. The current Climate Action Program for the 2014-2020 period seeks to strengthen the Federal District Government (GDF) climate policy and build on the achievements of the previous program.

Other examples of Mexico City's performance on its commitments is the city's improvement of its environmental management efforts since 1992, when the United Nations labeled it as "the most polluted city". In 1990, the Mexico City Government presented the first ProAire to combat local air pollution as well as CO2 emissions and has since implemented four consecutive programmes. The ProAire IV programme, launched in 2011 and running until 2020, contains 89 measures and 116 separate actions across eight strategy areas, including energy consumption, greening of the municipal transport fleets, education, green areas and reforestation, capacity building and scientific research[7]. These efforts have contributed significantly to reducing air pollution, and Mexico City is recognized by the UN as having shifted its agenda towards environmental sustainability.

Finally, Mexico City participates in various international forums to collaborate with other cities with respect to climate change adaptation and mitigation, and to report on its commitments. The City became a member of the voluntary Global Covenant of Cities on Climate ("The Mexico City Pact") in 2010. The Pact is a voluntary initiative of mayors and local authority representatives that aims to advance climate actions. As a signatory to the Pact, Mexico City reports on its climate commitments, performance and actions to the carbonn® Cities Climate Registry (cCCR). With respect to international commitments around mitigation, Mexico City is committed to the Compact of Mayors, which pledges to reduce its GHG emissions, make existing targets and plans public, and report on its progress annually through CDP. Mexico City was fully compliant with the Compact's four-step process in 2015[8] and will continue to report on its progress through the newly formed Global Covenant of Mayors for Climate and Energy.

Mexico City's Environmental Targets:

The city's Climate Action Program ("PACCM" in Spanish) provides a detailed guidance for reducing emissions by approximately 10 million tons of CO2e by 2020 – which would represent a decrease of almost 30% of emissions relative to the baseline. The city's local government operations GHG emissions reduction targets for 2020 include a reduction of: 14% in transport, 9% in waste, 5% in

[7] C40 Cities. Mexico City: ProAire. Accessed on October 26, 2016: **http://www.c40.org/profiles/2013-mexicocity**

[8] Compact of Mayors. Mexico City. Accessed on October 3, 2016: **https://www.compactofmayors.org/cities/mexico-city/**

facilities and 1% in buildings. In terms of adaptation, the Action Program aims to increase the city's resiliency as well as the population's adaptation capacities, particularly for the 5.6 million people most vulnerable to extreme weather events, such as flooding[9]. In order to support its adaptation strategy initiatives, the city is setting up a Resilience Office comprising 3 divisions and a 15-person team with the support of the Rockefeller Foundation's 100 Resilient Cities initiative.

Mexico City's General Program for Development (2013-2018) establishes the city's public policy priorities, including all objectives, goals, and related actions. This Program establishes climate change as a public policy priority, and includes the PACCM reduction target of 10 million tons of CO2e by 2020 as a policy objective. Mexico City also tracks and reports on these targets through its CDP Survey Responses. The city publically reports on its Scope 1, 2 and 3 emissions, which totaled 6,170,632 metric tonnes CO2e in 2012.

Mexico City's targets contribute to Mexico's national agenda for climate change mitigation. In April 2012, Mexico became the first developing country to adopt a General Climate Change Law ("LGCC" in Spanish), which is Mexico's main political tool for efficiently tackling climate change issues. The law is a legal framework that aims to reduce Mexico's emissions by 50% from 2000 levels by 2050 and serves as the foundation for the country's 40-year National Climate Change Strategy, which was adopted in 2013. Mexico's Climate Change Strategy as well as the LGCC clearly demonstrates that the country is moving forward in the fulfillment of its long-term international pledges.

[9] Mexico City's Climate Action Program: 2014-2020.

Appendix 3: Opinion on Green Use of Proceeds for the 2016 Green Bond Framework

Sustainalytics' Opinion on Sustainable Buildings and Climate Change Adaptation in Mexico City:
Buildings in Mexico City contribute at least 20% of GHG emissions, according to the World Resources Institute. Improving energy use in buildings will help Mexico City hit its ambitious goal of decreasing greenhouse gas emissions by 30% by 2020[10].

With respect to the sustainable buildings eligibility criterion, Sustainalytics recognizes that (i) LEED Gold and Platinum lead to higher energy efficiency gains than LEED Silver, and that (ii) Climate Bonds Initiative sets the target for a reduction in energy consumption at 30%. However, given the low degree of penetration of sustainable buildings in Mexico City, Sustainalytics views LEED Silver and a reduction in energy consumption of at least 15% as an achievable target. For example, in 2014, Mexico City had 37 LEED-certified projects and 148 LEED-registered projects[11]. Of the certified projects, 29 out of 37 were certified as LEED Silver or higher. Given this context, and the number of buildings in Mexico City, Sustainalytics is of the opinion that setting targets that are realizable for as many buildings as possible will result in significant overall impact. Wherever feasible, Sustainalytics encourages Mexico City to make best efforts to achieve LEED Gold or Platinum certification.

With respect to climate change adaptation, Sustainalytics has reviewed Mexico City government documents which confirm that the city has identified, and seeks to address, risks posed by climate change through the city's Resilience Strategy. The Mexico City Climate Action Program (PACCM) 2014-2020 states that about 5.6 million people in the city are vulnerable to climate change and describes their geographic location to threats such as heat waves, floods, and landslides based on predictions from the Mexico City Virtual Center for Climate Change. In Sustainalytics' opinion, Mexico City could strengthen its framework by conducting climate change risk studies for proposed projects under the adaptation eligibility criterion. Such project-specific studies strengthen the impact of the use of proceeds, as they establish a clear case that adaptation infrastructure is being funded as a direct response to climate change risks.

Importance of Sustainable Transport in Mexico City:
Mexico City already boasts an effective sustainable transport system. The city has made considerable strides in improving sustainable mobility options in the last decade by restricting the use of private cars and by developing its public transport system. 77.9% of all trips on a typical

[10] World Resources Institute. Building a More Competitive Mexico City Through Energy Efficiency. April 1, 2015. Accessed on October 17, 2016: **http://www.wri.org/blog/2015/04/building-more-competitive-mexico-city-through-energy-efficiency**

[11] World Green Building Council. Green Building City Market Brief: Mexico City. August 2014. Accessed on October 17, 2016: **http://www.worldgbc.org/files/1414/0982/5897/Mexico_City_-_City_Market_Brief_Final.pdf**

workday occur on public transport in Mexico City[12]. The City's Bus Rapid Transportation ("BRT") system, Metrobus, commenced in 2005 and has 1.1 million daily passengers. Metrobus has increased access to basic public services while contributing to climate change mitigation and has received recognition through the Sustainable Transport Award in 2013[13].

While noteworthy achievements have been made in Mexico City, there continues to be strong demand for continued development of sustainable transport infrastructure, as indicated by Greater Mexico City's projected population growth. The population of Greater Mexico City increased at a rate of 0.8% per year from 2010 to 2015, and it is expected to increase to approximately 23.9 million in 2030 from 20.8 million in 2014[14]. Improvements and expansions to the subway and BRT system will help to meet the city's growing transportation needs in a sustainable manner.

Importance of Water Efficiency and Wastewater Management in Mexico City:
Water infrastructure in Mexico City consists of water supply and distribution, wastewater collection, storm water collection and wastewater treatment. Water management has become a high priority for Mexico City and is included in the Mexico City's Climate Action Program (PACCM) as well as the city's Resilience Strategy, which was formalized in September 2016.

Mexico City loses 41.4% of its water due to an outdated, run-down water system which is plagued by thousands of small leaks over miles of underground piping[15]. The water distribution system is formed by 12,000 km of pipeline network, built 30 years ago, which contains many pipes that are now rusty and broken due to earthquakes and usage[16]. Furthermore, every year, the city extracts 1.3 billion cubic meters of water while rainfall, and some injection, recharges it by only 700 million cubic meters[17]. Thus, underground aquifers, which provides around 70% of the city's water, are drying at an alarming rate. These challenges results in 70% of the city having fewer than 12 hours of running water per day[18].

The Climate Action Local Strategy (ELAC) and Resilience Strategy identifies extreme rainfall, which may result in an increased number of floods, as one of the expected shocks associated with climate change. Shocks to sewage systems are projected during intense rainfall seasons, and the frequency

[12] Global BRT Data. Mexico City. Accessed on October 4, 2016: **http://brtdata.org/location/latin_america/mexico/mexico_city**

[13] Sustainable Transport Award Committee. Mexico City. Accessed on October 4, 2016: **http://staward.org/winners/2013-mexico-city-mexico/**

[14] United Nations. 2014. World Urbanization Prospects. Accessed on October 4, 2016, p. 26: **https://esa.un.org/unpd/wup/Publications/Files/WUP2014-Highlights.pdf**

[15] Ciudad de México. CDMX Resilience Strategy. 2016. Accessed on October 7, 2016: **http://www.100resilientcities.org/page/-/100rc/pdfs/CDMX%20Resilience%20Strategy%20-%20English.pdf**

[16] Platinum. 2015. Water in Mexico City. Accessed on October 6, 2016: **http://www.plantum.mx/single-post/2015/12/01/Water-in-Mexico-City-Artificial-Scarcity**

[17] **https://news.vice.com/article/millions-of-taps-run-dry-as-mexico-city-fixes-some-decrepit-water-pipes**

[18] Panoramas: Center for Latin American Studies at the University of Pittsburgh. 2015. Watering the Classes: Mexico City's Water Shortage. Accessed on October 6, 2016: **http://www.panoramas.pitt.edu/technology/watering-classes-mexico-citys-water-shortage**

and extent of such shocks may increase significantly due to lack of infrastructure maintenance or as a result of future earthquakes, which may result in damaged infrastructure in the city. There is an immediate need for the city to update its water infrastructure in order to address risks related to water distribution as well as stormwater collection.

In addition to water management, water treatment and sanitation are also important issues for the city. The use of large volumes of water, and the inability to recycle and reuse that water, generates a large volume of wastewater, most of which does not receive adequate treatment. Consequently, wastewater strongly affects environmental quality within discharge zones. Today, the city's wastewater is primary diverted to the Mezquital watershed in the north for irrigation purposes. While wastewater has been used for irrigation in the area for nearly a century, the untreated water has led to sanitary and environmental problems. An additional benefit to increasing the city's capacity to treat wastewater is that Mexico City may be able to alleviate much of the demand for freshwater, particularly in the industrial and agricultural industry.

Mexico City's Climate Action Program (PACCM), as well as its new Resilience Strategy, prioritizes improvements to water infrastructure in the City and outlines specific targets to address the concerns related to water and wastewater management. Mexico City has layed down a foundation to plan integrated solutions that meet the challenges posed by urbanization and climate change, specifically as they relate to water management.

Appendix 4: Opinion on Risk Mitigation for the 2016 Green Bond Framework

Well positioned to address common challenges associated with infrastructure projects in emerging markets:

Sustainalytics recognizes that infrastructure development projects generally create environmental and social risks in addition to benefits. Sustainalytics is of the opinion that Mexico City is well positioned to manage and address such risks.

Environmental risks include loss of biodiversity during construction, pollution from construction and construction materials, and loss of land usable for reforestation. Mexico City conducts Environmental Impact Assessments (EIA) in order to assess and manage environmental impacts resulting from infrastructure projects. The works and activities subject to EIAs are defined under an article within the Environmental Protection law, which includes activities that can cause grave and irreparable ecological imbalance, and have a harmful effect on public health or the ecosystem. Such projects require an assessment in the form of an EIA, a risks study or a strategic environmental assessment before construction can begin. In cases where a comprehensive study is not required, an administrative filing is needed to initiate the project. Mexico City further requires a continuous assessment of environmental damages as well as an annual update on environmental licenses, which covers several authorizations and permits in one single filing.

Social risks include negative impacts on populations. Mexico City has confirmed to Sustainalytics that no slum populations exist in or near the geographic areas of the eligible projects and thus no populations are expected to be displaced. With respect to labor conditions for eligible projects, Article 123 of the Constitution of Mexico requires adherence to standards and principles in the workplace, including duties of the employer in the field of occupational safety and health. The Federal Regulation on Occupational Safety and Hygiene (OSH) and the Working Environment aims to set up the necessary measures to prevent accidents and diseases in addition to ensuring safe and healthy working conditions for workers. Mexico City reports having a stringent enforcement system to ensure compliance to all applicable labour laws, regulations and standards and ensure that Mexico City's employees and all stakeholders affected by proposed projects are protected as comprehensively as possible.

Appendix 5: Green Bond/Green Bond Programme External Review Form

Green Bond / Green Bond Programme
External Review Form

Section 1. Basic Information

Issuer name: Gobierno de la Ciudad de Mexico (CDMX, Mexico City)

Green Bond ISIN or Issuer Green Bond Framework Name, if applicable*:* CDMX Sustainability Bond Framework

Review provider's name: Sustainalytics

Completion date of this form: September 6, 2017

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarize the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- ☒ Use of Proceeds
- ☒ Management of Proceeds
- ☒ Process for Project Evaluation and Selection
- ☒ Reporting

ROLE(S) OF REVIEW PROVIDER

- ☒ Consultancy (incl. 2nd opinion)
- ☐ Verification
- ☐ Other *(please specify)*:
- ☐ Certification
- ☐ Rating

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Sustainability Bond Framework, provided in a separate document, and Second Opinion Document above.

Section 3. Detailed review

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:
Overall, Sustainalytics is of the opinion that Mexico City's project eligibility criteria are credible and robust, and that by selecting projects based on these criteria, Mexico City is effectively targeting its Sustainability Bond proceeds at projects with demonstrable social and environmental benefits

Use of proceeds categories as per GBP:

☒	Renewable energy	☒	Energy efficiency
☒	Pollution prevention and control	☐	Sustainable management of living natural resources
☒	Terrestrial and aquatic biodiversity conservation	☒	Clean transportation
☒	Sustainable water management	☒	Climate change adaptation
☒	Eco-efficient products, production technologies and processes	☒	Other *(please specify)*: Essential public services
☐	Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs		

If applicable please specify the environmental taxonomy, if other than GBPs: *Not applicable*

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section *(if applicable)*:
The Mexico City Finance Ministry will identify and propose potential green projects based on the eligibility criteria outlined in the CDMX Sustainability Bond Framework.

The Mexico City Ministry of Environment will review all proposed (existing and future) potential green projects and confirm their eligibility under the CDMX Green Bond Framework and alignment with Mexico City's environmental and climate change policies and plans.

Relevant ministries will review social projects to confirm their eligibility under the CDMX Sustainability Bond Framework and alignment with Mexico City's General Development Program

2013-2018. Ministries will ensure projects and services target areas designated as medium, low, or very low on the Mexico City Social Development Index as well as key vulnerable populations.

Evaluation and selection

- ☒ Defined and transparent criteria for projects eligible for Green Bond proceeds
- ☒ Summary criteria for project evaluation and selection publicly available
- ☒ Documented process to determine that projects fit within defined categories
- ☐ Other *(please specify):*

Information on Responsibilities and Accountability

- ☐ Evaluation / Selection criteria subject to external advice or verification
- ☒ In-house assessment
- ☐ Other *(please specify)*:

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)***:**
The Mexico City Finance will manage the net proceeds of the Sustainability Bond Framework and will maintain internal records tracking the allocation of the net proceeds to eligible green projects.

As required under Mexican regulations, the projects financed by the net proceeds will be registered with the Mexican Secretariat of Finance and Public Credit prior to bond issuance. As required under Mexican regulations, the net proceeds will be allocated by end of the fiscal year of bond issuance. Pending allocation, the net proceeds will be held in accordance with the normal liquidity management policy of Mexico City Finance Ministry.

Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in a systematic manner
- ☐ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other *(please specify)*:

Additional disclosure:

- ☐ Allocations to future investments only
- ☒ Allocations to both existing and future investments
- ☐ Allocation to individual disbursements
- ☐ Allocation to a portfolio of disbursements

☐ Disclosure of portfolio balance of unallocated proceeds

☐ Other *(please specify)*:

4. REPORTING

Overall comment on section *(if applicable)***:**
At the time of issuance, the Mexico City Finance Ministry will publish the list of projects to which Sustainability Bond proceeds will be potentially allocated.

Within one year of issuing a Sustainability Bond, the Mexico City Finance Ministry will publish a CDMX Sustainability Bond Report on its website (http://data.finanzas.cdmx.gob.mx/index.html). Thereafter, an updated report will be published if necessary in the event of new developments. The latest version of this report will be available on the Mexico City Finance Ministry website as long as the Sustainability Bonds are outstanding.

The Mexico City Sustainability Bond Report will contain at a minimum: (1) The list of eligible projects and amounts allocated to each project (2) Confirmation that the use of proceeds of the Sustainability Bonds conforms to the CDMX Sustainability Bond Framework (3) Impact reporting elements

Use of proceeds reporting:

☒ Project-by-project

☐ On a project portfolio basis

☐ Linkage to individual bond(s)

☐ Other *(please specify):*

Information reported:

☒ Allocated amounts

☐ GB financed share of total investment

☐ Other *(please specify):*

Frequency:

☐ Annual

☐ Semi-annual

☒ Other *(please specify): within one year*

Impact reporting:

☒ Project-by-project

☐ On a project portfolio basis

☐ Linkage to individual bond(s)

☐ Other *(please specify):*

Frequency:

☐ Annual

☐ Semi-annual

☒ Other *(please specify): within one year*

Information reported (expected or ex-post):

☒ GHG Emissions / Savings

☒ Energy Savings

☒ Other ESG indicators *(please specify): water use reduction, volume of water / wastewater collected/stored/treated, number of passengers benefitting from sustainable transport, number of beneficiaries*

Means of Disclosure

☐ Information published in financial report

☐ Information published in sustainability report

☐ Information published in ad hoc documents

☒ Other *(please specify): Mexico City Finance Ministry's website*

☐ Reporting reviewed *(if yes, please specify which parts of the reporting are subject to external review):*

Where appropriate, please specify name and date of publication in the useful links section.
USEFUL LINKS *(e.g. to review provider methodology or credentials, to issuer's documentation, etc.)*

http://data.finanzas.cdmx.gob.mx/index.html

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE
Type(s) of Review provided:

☒ Consultancy (incl. 2nd opinion)

☐ Certification

☐ Verification / Audit

☐ Rating

☐ Other *(please specify):*

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF REVIEW PROVIDERS AS DEFINED BY THE GBP

(i) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in environmental sustainability or other aspects of the issuance of a Green Bond, such as the establishment/review of an issuer's Green Bond framework. "Second opinions" may fall into this category.

(ii) Verification: An issuer can have its Green Bond, associated Green Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria.

(iii) Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against an external green assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties / certifiers.

(iv) Rating: An issuer can have its Green Bond or associated Green Bond framework rated by qualified third parties, such as specialised research providers or rating agencies. Green Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Green Bond frameworks / programmes.

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SUSTAINALYTICS

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SUSTAINALYTICS Named **Most Impressive Second Opinion Provider**