Board of Executive Directors

For consideration

On or after 27 November 2018

PR-4640
13 November 2018
Original: Spanish
Public
Simultaneous Disclosure

To: The Executive Directors

From: The Secretary

Subject: Brazil. Proposal for a loan for the “Public Infrastructure Management Investment Program for Municipal Efficiency”

Basic Information:

Loan type ..... Global Credit Operation (GCR)

Borrower ..... *Banco do Brasil S.A.*

Amount ..... up to US$600,000,000

Source .....Ordinary Capital

Inquiries to: Karisa Ribeiro (telephone Country Office in Brazil 5561-3317-4247) or
Arturo Alarcón (telephone Country Office in Brazil 5561-3317-4145)

Remarks: This operation is included in Annex III of document GN-2915, "2018 Operational Program Report" or the respective update. However, its amount exceeds the ceiling established for Group A countries. Therefore, the operation does not qualify for approval by No-Objection Procedure, in accordance with Part III of document GN-1838-3.

Reference: GN-1838-3(6/18), DR-398-18(8/18), GN-2915(2/18), GN-2915-2(8/18)

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DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

PUBLIC INFRASTRUCTURE MANAGEMENT INVESTMENT PROGRAM FOR MUNICIPAL EFFICIENCY (MUNICIPAL EFFICIENCY PROGRAM)

(BR-L1503)

LOAN PROPOSAL

This document was prepared by the project team consisting of: Karisa Ribeiro (TSP/CBR), Project Team Leader; Arturo Alarcón (ENE/CBR), Alternate Project Team Leader; Gustavo Mendez (WSA/CBR); Alejandro Taddia, Mauro Alem, Luis Uechi, Agustina Cocha, and Alba Taveras (INE/TSP); Luciano Schweizer (CMF/CBR); Jason Hobbs (HUD/CBR); Barbara Brakarz (CCS/CBR); Ana Dezolt (FMM/CBR); Cristina Marzo (LEG/SGO); Santiago Schneider and Karina Díaz (FMP/CBR); Zachary Hurwitz and Santiago Olmos (VPS/ESG); Sisi Larrea Castelo (INE/INE); Óscar Mitnik (SPD/SDV); Consuelo Yepez (CAN/CAN); Juanita Riaño Londoño (OII/OII); and Marcelo da Silva (ITE/IPS).

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REQUIRED

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2. Monitoring and Evaluation Plan
3. Environmental and Social Management Report

OPTIONAL

1. Economic evaluation
2. Resolution 01/0122 – Municipal Efficiency Program
3. Program Credit Regulations
4. IDB-Banco do Brasil gap analysis
5. Diagnostic assessment of Banco do Brasil processes
6. Diagnostic assessment of municípios
7. Diagnostic assessment – street lighting and energy efficiency
8. Diagnostic assessment – urban transportation and mobility
9. Diagnostic assessment – sanitation
10. Public Utilities Policy
11. Monitoring and supervision prototype
12. UniBB public sector
13. Integrated waste management protocol
14. Environmental analysis
15. Banco do Brasil Annual Report (2016)
16. Sustainable infrastructure
17. Resilient municipal infrastructure
18. Credit operations under the Municipal Efficiency Program credit line
19. Banco do Brasil credit rating
20. Joint Report on Multilateral Development Banks' Climate Finance (2015)

ABBREVIATIONS

BNDES	Banco Nacional de Desenvolvimento Econômico e Social [National Economic and Social Development Bank]
BROU	Banco de la República Oriental del Uruguay
CGU	Controladuria Geral da União [Office of the Comptroller General of the Union]
DIGOV	Diretoria de Governo do Banco do Brasil [Banco do Brasil Governing Board]
FNP	Foro Nacional de Prefeitos [National Forum of Mayors]
IBGE	Instituto Brasileiro de Geografia e Estatística [Brazilian Institute of Geography and Statistics]
ICB	International competitive bidding
ICAP	Institutional Capacity Assessment Platform
LED	Light-emitting diode
LIBOR	London Interbank Offered Rate
MWh	Megawatt hour
NCB	National competitive bidding
PNAFM	Programa Nacional de Apoio à Gestão Administrativa e Fiscal dos Municípios Brasileiros [National Program to Support the Administrative and Fiscal Management of Brazilian Municípios]
PNSB	Plano Nacional de Saneamento Básico [National Basic Sanitation Plan]
TCU	Tribunal de Contas da União [Federal Audit Office]
TWh	Terawatt hour
UniBB	Universidade Corporativa do Banco do Brasil [Banco do Brasil Corporate University]

PROGRAM SUMMARY

BRAZIL
PUBLIC INFRASTRUCTURE MANAGEMENT INVESTMENT PROGRAM FOR MUNICIPAL EFFICIENCY (MUNICIPAL EFFICIENCY PROGRAM) (BR-L1503)

<table>
<tr><th colspan="6">Financial Terms and Conditions</th></tr>
<tr><td colspan="3">Borrower: Banco do Brasil S.A. (Banco do Brasil)</td><td colspan="3">Flexible Financing Facility[a]</td></tr>
<tr><td colspan="3" rowspan="2">Guarantor: Federative Republic of Brazil</td><td>Amortization period:</td><td colspan="2">25 years</td></tr>
<tr><td>Disbursement period:</td><td colspan="2">5 years</td></tr>
<tr><td colspan="3" rowspan="2">Executing agency: Banco do Brasil</td><td>Grace period:</td><td colspan="2">5.5 years[b]</td></tr>
<tr><td>Interest rate:</td><td colspan="2">LIBOR-based</td></tr>
<tr><td>Source</td><td>Amount (US$)</td><td>%</td><td>Credit fee:</td><td colspan="2">[c]</td></tr>
<tr><td>IDB (Ordinary Capital):</td><td>600 million</td><td>100</td><td>Inspection and supervision fee:</td><td colspan="2">[c]</td></tr>
<tr><td rowspan="2">Total:</td><td rowspan="2">600 million</td><td rowspan="2">100</td><td>Weighted average life:</td><td colspan="2">15.25 years[d]</td></tr>
<tr><td>Approval currency:</td><td colspan="2">United States dollar
(from the Ordinary Capital)</td></tr>
<tr><th colspan="6">Program at a Glance</th></tr>
<tr><td colspan="6">Program objective: The program objective is to improve and enhance the efficiency of municipal infrastructure and public services, through investments and innovative solutions financed with a Banco do Brasil credit line. Its specific objectives are to: (i) improve the energy efficiency of public lighting and public buildings; (ii) reduce physical and commercial water losses; and (iii) upgrade the road infrastructure of municipal transportation systems.</td></tr>
<tr><td colspan="6">Special contractual conditions precedent to the first disbursement of the loan proceeds: As a special contractual condition precedent to the first disbursement of the loan proceeds, the program Credit Regulations will have been approved and entered into effect under the terms agreed upon with the Bank (paragraph 3.6).
Environmental and social contractual conditions of execution: The execution conditions are described in Annex B of the environmental and social management report.</td></tr>
<tr><td colspan="6">Exceptions to Bank policies: The guarantee provided by the Federative Republic of Brazil will be limited to the borrower's financial obligations under the loan (including the payment of principal, interest, and other lending charges) and will not cover any physical performance obligations or local counterpart contributions. It is therefore proposed that the Board of Executive Directors approve a partial waiver of the Bank's policy on the guarantees to be presented by the borrower (document GP-104-2) (paragraph 3.2).</td></tr>
<tr><th colspan="6">Strategic Alignment</th></tr>
<tr><td colspan="2">Challenges:[e]</td><td colspan="4">SI ☐ PI ☑ EI ☐</td></tr>
<tr><td colspan="2">Crosscutting themes:[f]</td><td colspan="4">GD ☑ CC ☑ IC ☐</td></tr>
</table>

(a) Under the terms of the Flexible Financing Facility (document FN-655-1), the borrower has the option of requesting changes to the amortization schedule, as well as currency and interest rate conversions. The Bank will take operational and risk management considerations into account when reviewing such requests.

(b) Under the flexible repayment options of the Flexible Financing Facility, changes to the grace period are permitted provided that they do not entail any extension of the original weighted average life of the loan or the last payment date as documented in the loan contract.

(c) The credit fee and inspection and supervision fee will be established periodically by the Board of Executive Directors as part of its review of the Bank's lending charges, in accordance with the applicable policies.

(d) The original weighted average life of the loan may be shorter, depending on the effective signature date of the loan contract.

(e) SI (Social Inclusion and Equality); PI (Productivity and Innovation); and EI (Economic Integration).

(f) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (Institutional Capacity and the Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

1.1 **Macroeconomic context of Brazil.** The country faces major challenges in keeping its economy on a sustainable growth path. Brazil has suffered one of its most severe economic crises in recent years, with gross domestic product shrinking by 3.8% in 2015 and by a further 3.6% in the following year.[1] In 2017, GDP growth was just 1.04%.[2] The country's economic recovery is expected to be slow and gradual, with growth rates of 2.83% projected for 2018 and 3% for 2019.[3]

1.2 This low-growth scenario has resulted in decreased revenue intake and municipal income, thereby reducing the financial capacity of municípios to sustain their levels of infrastructure investment and/or manage the efficiency of infrastructure and public services. According to the National Forum of Mayors (FNP),[4] 2016 marked a 10-year low in the allocation of funding for municipal investment, with just 7.6% of total municipal spending allocated for infrastructure investment, compared to an average of 11 % in the preceding 10 years.

1.3 **Access to financing.** According to Credit Suisse (2017),[5] bank lending as a percentage of GDP expanded vigorously—from 24.3% of GDP in 2003 to 53.7% in 2015, before retreating to 49.6% of GDP in 2016 and to 48.1% the following year, and is expected to slip further to 46.6% of GDP in 2018. Bank lending shrank by 3.5% in 2016 before expanding by 1.9% in 2017; and is expected to grow by 4.6% in 2018. Despite signs of a recovery in lending to municipal governments, the amounts in question are still well below the US$3.5 billion figure in 2014—i.e. just US$1.1 billion in 2015, US$816 million in 2016, and US$1 billion in 2017.[6] Moreover, municípios with larger populations (over 500,000 inhabitants) have better access to credit than those with medium-sized and small populations,[7] thereby undermining their investment capacity.

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1 Federal Revenue Secretariat of Brazil (SIFB). Análise da arrecadação das receitas federais. December 2017.

2 Government of Brazil. Brasil cresce 1,04% em 2017 e supera crise. 27 February 2018.

3 Central Bank of Brazil. Focus – Reporte de Mercado. 16 March 2018.

4 FNP. Anuário Multiciudades – Finanças dos municípios do Brasil. Ano 13, 2018.

5 Credit Suisse. Brasil – Cenário ainda incierto em 2017 e 2018. 6 October 2017.

6 System for the Analysis of Public Debt, Credit Operations, and Guarantees of the Union, States, and Municípios (SADIMPEM). Reporte de Pedidos de Verificação de Limites e Condições (PVL). 2018.

7 FNP. Anuário Multicidades – Finanças dos municípios do Brasil. Ano 13, 2018.

Table 1. Share of lending for municipal investment by population size –2016 (FNP, 2018)

Municipal population	Total inhabitants	Total municipal investment (US$ million)[(a)]	Total municipal investment loans (US$ million)[(b)]	Percentage of municipal investment loans	Total municipal investment per capita (US$ /person)	Total municipal investment loans per capita (US$ /person)
Up to 20,000	**32,227,796**	2,315.8	104.2	4.5%	71.86	3.23
From 20,000 to 50,000	**33,526,377**	1,826.4	113.2	6.2%	54.48	3.38
From 50,000 to 100,000	**24,658,771**	1,165.4	127.0	10.9%	47.26	5.15
From 100,000 to 200,000	**21,783,358**	1,138.6	107.0	9.4%	52.27	4.91
From 200,000 to 500,000	**32,839,617**	2,098.0	373.4	17.8%	63.89	11.37
Over 500,000	**62,625,010**	4,349.9	1,422.4	32.7%	69.46	22.71
TOTAL	**207,660,929**	12,894.1	2,247.2	-	62.09	10.82

(a) Exchange rate used: US$1 = R$3.20.
(b) Idem.

1.4 **Infrastructure management, productivity, and economic growth.** The reduction and scarce availability of municipal resources for investment, and low volume of lending to the smaller municípios hinder local development. A study by the National Bank for Economic and Social Development (BNDES)[8] shows that underinvestment in infrastructure affects the population's quality of life, while reducing the productivity, efficiency, and growth of the economy. According to a 2014 Bank report,[9] infrastructure impacts growth by enhancing the economy's productivity, reducing production costs, diversifying the production structure, and creating jobs due to the demand for goods and services used to provide this infrastructure. Recent estimates (Gischler et al, 2013)[10] show that the adoption of modern energy-efficient technologies can have significant impacts on the economy: by adopting energy-efficiency policies and generating power from renewables, the countries of the Eastern Caribbean could achieve fuel import cost savings estimated at 17% of their 2011 GDP. Improved infrastructure planning, the preparation of projects that are implemented properly and on schedule, together with better asset maintenance, reduced losses, and the implementation of policies to optimize demand can raise infrastructure productivity by up to 60% (McKinsey Global Institute, 2013; cited in IDB, 2014). Globally, this situation is reflected in such international indicators as the World Economic Forum's 2017-2018 global competitiveness ranking, in which Brazil is ranked 80th, having slipped down the ranking successively in recent years.[11]

1.5 The World Bank[12] estimates that for Brazil to grow sustainably, it will need to invest 4.25% of GDP per year between 2015 and 2025 for infrastructure expansion and maintenance, compared to the 1.97% of GDP spent on this annually between 2011

8 BNDES. A infraestrutura dos serviços públicos e o território urbano: Sudeste. 2015.
9 IDB. Sustainable Infrastructure for Competitiveness and Inclusive Growth. 2014.
10 Idem.
11 World Economic Forum. The Global Competitiveness Report 2017-2018.
12 World Bank. Back to Planning: How to Close Brazil's Infrastructure Gap in Times of Austerity. July 2017.

and 2015. These numbers are significant, considering that for every 1% of investment to expand coverage of the urban infrastructure network (water supply, sanitary sewerage, urban mobility, and public lighting), municipal productivity increases by 0.2%;[13] and that every 1% of public investment in infrastructure has the potential to generate GDP growth of 0.28%.[14] According to The New Climate Economy, low-carbon urban actions available today could generate a stream of savings in the period to 2050 with a current value of US$16.6 trillion, and potentially reduce annual greenhouse gas emissions by 3.7 gigatons of carbon dioxide equivalent per year.[15]

1.6 **Brazilian municipios.** Brazil has a total of 5,570 municípios,[16] which generally have low management capacity, resulting in the dispersion of actions and underutilization of scarce public resources. According to the FIRJAN Fiscal Management Index,[17] only 13 of the 4,544 municípios evaluated received an excellence rating for public resource management. Smaller municípios are most affected by the lack of technical capacity, procurement operations, resources for investment,[18] and the financial capacity required to obtain funding. According to estimates, 70% of Brazil's small municípios have the necessary capacity ("A" and/or "B") to use this investment credit line, with potential demand on the order of US$10 billion. The literature shows that the economic and social impact of investment spending depends on its efficiency, whereas the efficiency of investment spending depends fundamentally on how it is managed. A recent study shows that 30% of the potential benefits of public investment in a selected group of countries is squandered through management inefficiencies.[19] While the GDP impact of a 1% increase in investment in countries with efficient public investment management institutions is around 0.6%, the impact drops to half (0.3%) in those that have inefficient systems. The evidence in Latin America also suggests that better investment management can help close efficiency gaps: countries that have more developed national public investment systems have better efficiency indices.[20] According to the FNP,[21] innovation could be one way to overcome these weaknesses. However, the World Bank[22] argues that improving the efficiency of public spending and investment requires systems to monitor and evaluate existing policies and programs.

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13 Institute of Applied Economic Research (IPEA). Produtividade no Brasil: Desempenho e Determinantes (2015).

14 World Bank. Back to Planning: How to Close Brazil's Infrastructure Gap in Times of Austerity. July 2017.

15 The New Climate Economy. Seizing the Global Opportunity – Partnerships for Better Growth and a Better Climate – The 2015 New Climate Economy Report (2015).

16 Forty-one municípios with more than 500,000 inhabitants (or 30% of Brazil's total population); 618 with a population of between 500,000 and 50,000 (38%); 1,100 with between 50,000 and 20,000 (16%); and 3,811 with 20,000 or fewer inhabitants (16%). Source: IBGE. Estimativa da população.

17 Industry Federation of the State of Rio de Janeiro (FIRJAN) Fiscal Management Index 2017.

18 IBGE: Perfil dos municípios brasileiros 2015.

19 International Monetary Fund (IMF), 2015. Making Public Investment More Efficient.

20 Armendariz and Contreras (2016). El gasto de inversión pública en América Latina: cuánto y cuán eficiente.

21 FNP. Anuário Multicidades – Finanças dos municípios do Brasil. Ano 13, 2018.

22 World Bank. A Fair Adjustment: An Analysis of the Efficiency and Equity of Public Spending in Brazil: Volume 1, Overview, November 2017.

1.7 **Energy efficiency.** In 2016, the combined energy consumption of public lighting, the public sector, and public services was 45 terawatt hours (TWh) (9.8% of the country's total demand).[23] Electric power is the second largest municipal expenditure category, after wages. Municipal electricity consumption includes: (i) public lighting; (ii) municipal public building energy management (e.g. interior lighting and air-conditioning of schools and other municipal buildings); and (iii) electricity consumption associated with public utilities provided by the municípios (e.g. water and sewerage service). There is ample potential for increasing energy efficiency in this sector. Consequently, municipal and state governments have a key role to play in the development, implementation, and demonstration of energy-efficiency and renewable energy policies and projects, to guarantee energy security. [24]

1.8 The National Energy Efficiency Plan[25] estimates that there are 483,282 public buildings in Brazil, 31% of which are municipal. [26] Many of these building use antiquated technologies. Of these, air-conditioning and lighting systems consume the most energy, but can be upgraded with more efficient equipment and modern control systems. [27] The potential for reducing electricity consumption in these buildings is estimated at between 25% and 40% (depending on the type of building and equipment), which would also have an impact on municipal energy expenditure. There is also considerable potential for improving the energy efficiency of water pumping systems, where energy accounts for up to 40% of the expenditures of these utilities.[28] Moreover, current regulations allow users (including public agencies) to install small-scale distributed generation systems (mainly solar), which make it possible to reduce electricity consumption and the associated expenses.

1.9 **Public lighting.** Under current regulations, public lighting is a municipal responsibility, and in 2016 it represented 3.1% of total electricity demand in the country (15 TWh). The public lighting grid consists of approximately 18.4 million fixtures, most of which use old-technology lamps (sodium and mercury vapor), found mainly in municípios with fewer than 500,000 inhabitants (75% of the total). Total spending on public lighting is estimated at US$2.4 billion per year and trending up, owing to rising electricity rates. This expenditure has a relatively greater impact on the smaller municípios (Table 2). Replacing sodium and mercury lamps with light-emitting diode (LED) technology would cut street lighting energy consumption[29] by half, with the corresponding impact on municipal expenses. Moreover, LED lamps last roughly twice as long their sodium vapor counterparts, so they would also help reduce the maintenance costs of public lighting systems. Lastly, new technologies make it possible to integrate public lighting with other services, such as wi-fi and

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[23] Energy Research Company (EPE). Anuário Estatístico de Energia Elétrica – Empresa de Pesquisa Energética. 2017.

[24] Developing Clean Energy Solutions in Latin America's Major Cities: An Introduction for Subnational Energy Policy Decision-Makers (2017).

[25] Ministry of Mines and Energy. Plano Nacional de Eficiência Energética (2011).

[26] Ministry of Mines and Energy. Procel – División de Eficiência Energética em Prédios Públicos.

[27] Eletrobrás. Guía Técnico Procel Edifica – Planejamento e controle ambiental-urbano e a eficiência energética (2013).

[28] Energy Efficiency in Water Utilities: The Case of Guyana.

[29] EGP-Energy. Brasil – Gestão eficiente da iluminação pública e dos prédios públicos pode reducir em 30% a conta de energía elétrica de um município (2016).

traffic control. Nonetheless, the higher cost of investing in more efficient technologies (two to three times more than traditional technologies), compounded by the current economic crisis affecting investment capacity, mean that Brazil's municípios have difficulty funding investments to expand, upgrade, and maintain municipal public lighting systems with modern, more efficient technologies. According to the most recent official survey, the penetration rate of new efficient public lighting technologies remains below 0.1%.

Table 2. Average municipal energy consumption for public lighting

Municipality size	Total public lighting energy consumption (GWh/year) 2016	Total public lighting spending (US$ million) 2016	Per capita public lighting energy consumption (KWh/person/year)	Per capita public lighting spending (US$/person/year)
Over 500,000 inhabitants	3,680	588.72	58.77	9.40
Between 500,000 and 50,000 inhabitants	6,509	1,041.51	82.63	13.22
Between 50,000 and 20,000 inhabitants	2,345	375.28	70.01	11.20
Fewer than 20,000 inhabitants	2,466	394.49	76.52	12.24
Total	15,000	2,400.00	72.42	11.59

1.10 **Water system.** Although Brazil has made significant progress in water system coverage (93% coverage in urban areas and 80% in urban and rural areas), the efficiency of service delivery must be improved further to avoid charging rates that pass the cost of inefficiencies on to users. Accordingly, to improve the operational efficiency of these systems, it is crucial to reduce both physical and commercial water losses, which according to the National Basic Sanitation Plan (PNSB) average 38% nationwide. On this point, a study by Trata Brasil[30] found that if losses were reduced to 25% on average by 2033 (the PNSB planning date), gross profits would reach a level of R$1.9 billion per year. This could, for example, fund investments to provide sanitary sewerage coverage to 11.5 million people. The 2016 data from the Ministry of Cities' National Sanitation Information System[31] for small and medium-sized municípios (between 20,000 and 500,000 inhabitants) (see Table 3) reflect high distributional and billing losses, revealing the inefficiency of these systems and the need to improve infrastructure management.[32]

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30 http://www.tratabrasil.org.br/perdas-agua-desafios-ao-avanco-no-saneamento-basico-e-a-escassez-hidrica-2.

31 National System of Sanitation Information. Relação de indicadores de agua e saneamento por ano de referência (2016).

32 Brazilian Sanitary and Environmental Engineering Association (ABES). Control and reduction of losses in public water supply systems. October 2015.

Table 3. Average rate of water loss by município size

Município size	Total inhabitants	Average cost of water (US$/cubic meter[a]	Average water rate (US$/cubic meter)[b]	Average water-distribution loss index (%)	Average water-volume loss (cubic meters/day)	Average water cost per million people (US$/cubic meters/million inhabitants)	Average water rate per 1 million population (US$/cubic meter/million inhabitants)	Average water-volume loss per 1 million population (liters/year/ million inhabitants)
From 20,000 to 50,000 inhabitants	33,526,377	0.84	0.83	35%	2,816	0.03	0.02	30.7
From 50,000 to 200,000 inhabitants	46,442,129	0.92	0.97	42%	17,000	0.03	0.03	133.6
From 200,000 to 500,000 inhabitants	32,839,617	0.88	1.01	40%	34,639	0.03	0.03	385.0

(a) Exchange rate used US$1 = R$3.20.
(b) Idem.

1.11 An analysis of the sample of municípios included in the diagnostic assessment shows that the average coverage of water services is more than 85%, the macro-metering index is above 66%, and the micro-metering index is close to 90%. In other words, on average, operating conditions in the distribution systems warrant taking action to reduce losses. Considering the elevated volume of losses and the high return on investments to reduce them, municípios should make this a priority. However, the municípios themselves lack the necessary resources[33] to reduce losses and generate systemic efficiencies and technological improvements, including energy efficiency, so alternative funding sources would need to be secured.

1.12 The Bank has extensive experience in the design and execution of nonrevenue water programs in the region (e.g. loans 2624/OC-BH, 3591/OC-ME, 2845/OC-DR, and 2633/OC-JA), from which the following lessons have been drawn: (i) planning needs to be strengthened to invest more strategically in the short and medium terms; (ii) mechanisms need to be identified for prioritizing investments and ensuring that they are implemented in a logical sequence; (iii) systems need to be strengthened to generate indicators with reliable baselines that make it possible to track the impacts generated by the actions undertaken; (iv) minimal investments are needed, based on operator size, to obtain tangible results; and (v) operators need to be supported with capacity-building programs to ensure the sustainability of program actions.

1.13 **Road infrastructure, machinery, and equipment**. According to the National Confederation of Municípios,[34] municípios are legally responsible for 78.8% of Brazil's road network, and small municípios are responsible for 55% of that network. The Brazilian Institute of Geography and Statistics (IBGE)[35] reports that the quality of road infrastructure in municípios of up to 500,000 inhabitants present weak urban coverage, with average paving coverage of 76.98%; curbs, 72.8%; sidewalks,

33 Instituto Trata Brasil. Sanitation ranking 2017.

34 Movilidade Urbana Municipal (2016).

35 IBGE. Censo Demográfico 2010 – Características urbanísticas do entorno dos domicílios (2012).

61.92%; and street signage, 52.04%. A study by the National Transportation Confederation[36] notes that paving quality and signage on Brazilian roads also pose major challenges, since 51.9% of the roads assessed (federal, state, and municipal) presented some type of paving defect, and 61.8% had signage shortcomings.

1.14 It is also estimated that the machinery and equipment used for road rehabilitation and maintenance in Brazilian municípios have, on average, reached the end of their useful life,[37] exceeding the 10- to 15-year average in the transportation sector.[38] In 2010, the federal government launched a subprogram in the Growth Acceleration Program 2 (PAC2) to improve the transport of goods and people in the municípios. Accordingly, it donated 18,071 items of machinery and equipment to 5,061 municípios with up to 50,000 inhabitants, to help them build, refurbish, and maintain roads.[39] The program ended in 2014 and was not renewed owing to the country's macroeconomic situation, leaving a gap in the municípios.

1.15 In short, the municípios need support to enable them to create the necessary conditions to make investments in improving municipal road infrastructure, through paving existing roads, rehabilitating road surfaces, and making upgrades of more efficient machinery and equipment in these activities. Considering that the infrastructure built today will have direct impacts on the future global climate, it is imperative that infrastructure projects be planned, designed, built, and operated in a way that guarantees economic, financial, social, institutional, and climatic sustainability.[40]

1.16 **Banco do Brasil S.A.** Banco do Brasil[41] is organized as an open-stock, semipublic financial institution under the laws of the Federative Republic of Brazil. The Federative Republic is the majority shareholder with 50.7% of the voting shares, representing roughly 54% of its total capital.[42] Banco do Brasil is therefore an eligible public-sector borrower pursuant to the Eligible Borrowers Policy (Operational Policy OP-301), which defines a public sector borrower as having a proprietary interest (of more than 50% for a national government or government agency) or when such government or government agency has the power to nominate a majority of the members of the board of executive directors. Banco do Brasil has the largest service network in the country (99.8% of municípios).[43] In 2017,[44] it established a public-

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36 National Confederation of Transportation (CNT). Pesquisa CNT de Rodovias 2017 – Reporte Gerencial (2017).

37 ABIMAQ estimates that the average age of machinery and equipment in Brazilian manufacturing industry is 17 years, compared to averages of 7 and 4 years in Germany and the USA, respectively. Source: SIMUFESP. Indústria briga para renovar máquinas.

38 Brazilian Institute of Valuation and Legal Expertise of São Paulo (IBAPE-SP). Study on the useful life of machinery and equipment (2007).

39 Ministry of Agrarian Development (MDA). PAC 2.

40 IDB-IDB Invest. What is Sustainable Infrastructure? A Framework to Guide Sustainability Across the Project Cycle. 2018.

41 The Bank's most recent loan with Banco do Brasil was approved by the Bank's Board of Executive Directors in 1979 and the loan contract was signed on 29 April 1980 (Credit Line 12/VF-BR-C).

42 According to the report on Banco do Brasil's investor relations website.

43 Banco do Brasil. Resultado Banco do Brasil 4T17 (2018).

44 Banco do Brasil. Linha de crédito do Banco do Brasil amplia capacidade de investimento dos municipios brasileiros. Published on 12 July 2017.

sector credit line, known as the Municipal Efficiency Program,[45] for use in the procurement of goods, services, and investment projects by small and medium-sized Brazilian municípios. The credit line was targeted to 30% of the Brazilian municípios (approximately 40 million inhabitants) with financial capacity to use it. Within six months it had financed 36 public lighting and road infrastructure projects in cities of up to 500,000 inhabitants in all regions of Brazil, for a total of US$30 million (optional link 18).

1.17 Banco do Brasil is one of the main sources of municipal financing and has thus far demonstrated acceptable capacity for monitoring financial issues. Nonetheless, its sector technical capacity needs strengthening in the physical monitoring of the execution of infrastructure projects and municipal services.

1.18 **Problem and rationale.** Brazil's municípios face the challenge of making public services and municipal spending more efficient, in a challenging macroeconomic scenario, characterized by: (i) insufficient availability of credit for medium- and long-term financing to small and medium-sized municípios; and (ii) scarcity of resources to sustain infrastructure investment levels and/or manage the efficiency of existing infrastructure and public services in the energy, water, and road infrastructure sectors. Gaps in municipal infrastructure investment reflect a lack of financing owing to current macroeconomic conditions, and where the new existing technologies would make it possible to enhance the efficiency of municipal services.

1.19 The Banco do Brasil credit line seeks to reduce the credit crunch in Brazil for small and medium-sized municípios (up to 500,000 inhabitants), in order to modernize and streamline their infrastructure and public services (road infrastructure, energy, and water). This operation will help achieve these objectives by financing a line of credit, through subloans extended to the municípios by Banco do Brasil. The fact that subloan lending amounts are small, and many municípios are expected to participate, justifies structuring this operation as a global credit line. The application of this instrument is expected to benefit municípios that had no chance of direct access to the Bank's resources.

1.20 The literature[46] shows that in the United States alone the use of old and inadequate infrastructure result in additional annual costs of some US$25 billion in the energy sector and US$160 billion in road transport sector. In this context, making efficient use of existing infrastructure is fundamental; and the modernization and incorporation of new technologies and equipment to optimize existing infrastructures can be encouraged by the municipal entity. The importance of maintenance activity is exemplified in a study by Rioja (2013),[47] which estimates that, in Latin America, every dollar not spent on maintenance will eventually lead to US$3 to US$4 in premature reconstruction costs. A well-maintained road should last 10 to 15 years before it has to be repaved; but lack of maintenance can result in serious deterioration that requires resurfacing in just five years.

1.21 **Technological innovation.** The modernization of municipal systems with more energy-efficient equipment, together with the use of clean technologies, will promote

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[45] Forty-four projects have already been contracted under the program, for a total credit amount of approximately US$40 million in six months.

[46] BRINK News. Road to Economic Growth Paved with Efficient Infrastructure Investment. August 2017.

[47] Rioja. What Is the Value of Infrastructure Maintenance? A Survey. 2013.

the rational use of human and natural resources and make it possible to reduce systemic losses, improve public service delivery; increase energy efficiency, and enhance public expenditure with sustainable infrastructure in the municípios. These investments will help Brazil achieve its targets, as defined in its Nationally Determined Contributions[48] under the United Nations Framework Convention on Climate Change, since the energy and transport sectors jointly accounted for 50% of Brazil's greenhouse gas emissions (SEEG, 2016).[49] Investments to reduce losses in water supply systems will enable municípios to adapt better to the effects of climate change.

1.22 **Additionality and value added.** The Bank will support the technical, economic-financial, administrative, socioenvironmental, and managerial strengthening of Banco do Brasil, to channel medium- and long-term financing for investment in infrastructure designs and projects, and the procurement and installation of machinery, equipment, and management systems at the municipal level. This support will also seek to create and consolidate capabilities for the identification, monitoring, and evaluation of long-term investment loans, to help improve the institutional capacity of Banco do Brasil's municipal lending department. The program's value added will include: (i) consolidating a corporate framework in Banco do Brasil for investment in infrastructure management at the municipal level that enables it to leverage the knowledge generated from projects; (ii) promoting project design standards, project analysis, socioenvironmental evaluation standards, and project supervision during execution; and (iii) encouraging the implementation of innovative solutions in all sectors. There is also room to improve the socioeconomic evaluation of the benefits provided to society by Banco do Brasil-financed loans to the municípios. These activities will be undertaken through the following Bank-financed technical cooperation programs: (i) ATN/OC-16563-BR, currently in execution, with the aim of building Banco do Brasil institutional capacity (primarily on socioenvironmental and climate change issues), supporting sectoral needs in program design, monitoring, and evaluation,[50] as well as gender activities (paragraph 1.27); (ii) BR-T1394, which will support the promotion of low-carbon technologies in infrastructure using methodologies, mechanisms, and institutional frameworks to apply the transit-oriented development approach; and (iii) ATN/AA-16773-RG, which will provide tools for information and visualization during the execution and monitoring of projects, to improve information transparency. A technical cooperation operation (ATN/JF-16881-BR) is also being prepared to specifically support the development and implementation of municipal energy-efficiency projects with a focus on innovation. This operation also consolidates a strategic relationship with Banco do Brasil, whose solid governance provides a gateway to small and medium-sized municípios, thereby minimizing political risk in the allocation of funding. The Bank will also support the development of "standard type" projects to reduce implementation risks.

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48 Ratification by Brazil of the Paris Agreement in September 2016.

49 Greenhouse Gas Emissions and Removals Estimates (SEEG). Total emissions (2016).

50 The program has drawn on lessons learned from PROCIDADES in Cidades em transformação: experiências de desenvolvimento urbano no Brasil IDB (2016); Slum Upgrading: Lessons Learned from Brazil, IDB (2012); Building Cities: Neighborhood Upgrading and Quality of Urban Life, IDB (2009); projects: 2633/OC-JA; and 3596/OC-CO.

1.23 The technical cooperation operations (paragraph 1.22) are supporting the early development of document structures and models for municipal projects, standard designs, and a platform to meet the demands arising from the preparation and execution of Banco do Brasil's operations with municípios. In addition to capturing information and technical data, this tool will contribute to the project monitoring and supervision process, and to information management for the corporate framework. Data from each project will be included in this framework, which will be added to corporate targets developed between the Bank and Banco do Brasil.

1.24 This program also complements other financing initiatives for municípios already established in Brazil, such as the Tax Administration Modernization Program (PMAT) (loan 1194/OC-BR) and the National Program to Support the Administrative and Fiscal Management of Brazilian Municípios (PNAFM) (loan 2248/OC-BR)[51] which is mainly focused on promoting improved public management, through modernization of the municípios in the taxation, fiscal, and budgetary spheres; this latter program provides lessons learned for this new operation. The program also seeks to support a complementary dimension in the operation and maintenance of municipal infrastructure, with a view to making municipal spending on infrastructure and public expenditure overall more efficient.

1.25 **Lessons learned.** The preparation of this operation draws on lessons learned from previous operations with Brazilian municípios: (i) the project completion report and the monitoring, supervision and evaluation methodologies of the Paraná Urban Development Support Program – Paraná Urbano I and II (loans 917/OC-BR and 1405/OC-BR) provide considerable knowledge of the execution of Bank projects with smaller municípios; and (ii) the Office of Evaluation and Oversight evaluation of PROCIDADES operations (loans BR-L1043, 1986/OC-BR, 1990/OC-BR, 2246/OC-BR, 2121/OC-BR, and 2054/OC-BR). The evaluation in question recommends that investments be part of a municipal development plan and have standard designs, which are, respectively, demanded during the presentation of subloan proposals and developed as one of the program's institutional strengthening actions. Moreover, the standardization of procurement processes and public procurement courses used in the Fiscal Management Modernization Program in Brazil II operation (loan BR-X1039) and in the PNAFM will be used to support capacity building among this program's beneficiary municípios through the Banco do Brasil Corporate University (UniBB). Regionally, the lessons learned from Bogotá's Integrated Public Transit System Transformation Program (loan 3003/TC-CO) were also considered. This concluded that successful execution requires the program's Credit Regulations to be flexible, and that the operation should not depend on a single final client to activate a global credit line.

1.26 **Strategic alignment**. The program is consistent with the IDB Country Strategy with Brazil 2016-2018 (document GN-2850), since it aims to improve the condition of the country's infrastructure and strengthen the institutional capacity of public entities by providing a credit line for infrastructure investments by the municípios. The operation is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is strategically aligned with the productivity and innovation challenge, since it contributes to the improvement of services and infrastructure delivered to society by the municípios. The program is also aligned with the crosscutting theme

[51] PNAFM III (loan 3391/OC-BR) is currently in execution.

of climate change by improving energy efficiency and reducing greenhouse gas emissions resulting from the technological modernization of vehicles and reduction of losses in water supply systems. It is also aligned with the Gender and Diversity Sector Framework (document OP-1291-8) and the crosscutting theme of gender equality and diversity, through actions that promote employment for women and the strengthening of Banco do Brasil's gender policy.

1.27 **Gender.** To address gender issues, the Bank will support the preparation of a gender strategy for Banco do Brasil, through technical cooperation operation ATN/OC-16563-BR, which will include updating of the latter's gender baseline and a review of progress made in implementing its gender policy. This will strengthen actions to promote the employment and empowerment of women and their access to decision-making positions. This activity will help Banco do Brasil validate the gender policy that has been in execution since 2004, and will also help the Bank strengthen its gender policy activities. This technical cooperation operation will also enable the Bank to promote gender training through UniBB, which can be accessed by Banco do Brasil staff and employees of this operation's beneficiary municípios. The UniBB portal is the first strategic initiative offering structured educational content (e-learning) for Banco do Brasil clients. It contains 60 free professional development courses, courses on specific municipal management and gender topics, and other course offerings, provided through a platform offering videos, books, documents, good practices, success stories, and useful links from various areas.

1.28 The program is also consistent with: (i) the Transportation Sector Framework (document GN-2740-7) because it promotes energy efficiency, clean technologies, and more efficient designs, as well as measures to support transportation consolidation within the public body, by seeking to promote improvements in road infrastructure and the use of more modern equipment; (ii) the Energy Sector Framework (document GN-2830-3), by supporting energy sustainability through making energy use in the municipal public sector more efficient; (iii) the Innovation, Science and Technology Sector Framework (document GN-2791-8), through financing for innovation as a key to increasing productivity and economic development; (iv) the dimensions of success and lines of action of the Water and Sanitation Sector Framework (document GN-2781-8) to strengthen governance of the sector and foster efficient and sustainable management of water and sanitation services; and (v) the Sustainable Infrastructure for Competitiveness and Inclusive Growth Strategy (document GN-2710-5), with the strategic principles of adopting and encouraging a multisectoral agenda and promoting continued development in infrastructure governance. It also contributes to the following indicators of the Corporate Results Framework 2016-2019 (document GN-2727-6): (i) government agencies benefited by projects that strengthen technological and management tools to improve public service delivery; and (ii) reduction of emissions with support of IDB Group financing (annual millions of tons of CO_2 equivalent). The operation is also included in the Update of Annex III of the 2018 Operational Program Report (document GN-2915-2).

1.29 **Climate change.** The program is also consistent with the Bank's Integrated Strategy for Climate Change Mitigation and Adaptation and Sustainable and Renewable Energy (document GN-2609-1) and the Climate Change Sector Framework (document GN-2835-3). Roughly 33% of the operation's resources are invested in climate change mitigation and adaptation activities, according to joint methodology of the multilateral development banks for tracking climate change adaptation finance

(optional link 20). These resources contribute to the IDB Group target of increasing financing for climate-related projects to 30% of approvals by the end of 2020.

1.30 **IDB Public Utility Policy.** The proposed program and the national sector objectives and policies are consistent with the principles of the Bank's Public Utilities Policy (document GN-2716-6) in the water sector (optional link 10), and they meet the financial sustainability and economic evaluation conditions. The financial situation of the water companies included in the sample enables them to adequately cover their costs. On average, their income is 20% above their operating costs. In addition, the measures to be financed with the program are also socioeconomically viable (paragraph 1.41). Moreover, the regulatory frameworks require the firms to charge a differentiated social rate to low-income households; and there is an adequate institutional framework in the sector, with due separation of functions and responsibilities.

B. Objectives, components, and cost

1.31 **Objective.** The program's objective is to improve and enhance the efficiency of municipal infrastructure and public services, through investments and innovative solutions financed with a Banco do Brasil credit line.

1.32 The specific objectives are to: (i) improve the energy efficiency of public lighting and public buildings; (ii) reduce physical and commercial water losses; and (iii) upgrade the road infrastructure of municipal transportation systems.

1.33 **Program beneficiaries.** The main beneficiaries are the populations of Brazilian municípios with fewer than 500,000 inhabitants (70% of the country's total population), who will receive improved municipal public services. These benefits are to be provided through municipal governments that will receive additional funding to offset the gap in their level of investment in equipment and new infrastructure management technologies.

1.34 **Component I. Improvement of municipal infrastructure (US$600 million).** The program will finance a component structured in three subcomponents. This component consists of a long-term multisector credit line to Banco do Brasil, which will use it to make subloans to small and medium-sized municípios in all regions of Brazil, thereby enabling them to finance investment projects in energy efficiency, public lighting, road infrastructure, and water supply systems.

1.35 **Subcomponent I.1. Public lighting and energy efficiency.** The program seeks to offer a municipal project package that includes financing for actions to enhance energy efficiency in municipal public buildings and public lighting, including the replacement of equipment with more efficient alternatives, installation of control systems, and distributed generation.

1.36 **Subcomponent I.2. Basic sanitation.** The program aims to offer a municipal project package that included actions to reduce losses in water supply systems, including the procurement and installation of machinery, equipment, and management systems.

1.37 **Subcomponent 1.3 Improving municipal transit system road infrastructure.** The program seeks to offer a municipal project package that includes financing for refurbishment and paving of existing roads, and procurement and installation of machinery and equipment for road infrastructure maintenance.

1.38 Detailed information on the items that can be financed through the Banco do Brasil credit line is provided in the draft program Credit Regulations (optional link 3).

1.39 **Cost.** The total cost of the program is US$600 million, to be financed by an investment loan under the Global Credit Operation (CGR) modality (see Table 4).

Table 4. Program costs and financing (US$ millions)

Category	Bank	Local	Total	%
Component I				
Subcomponent I.1. Public lighting and energy efficiency	200	0	200	33,33%
Subcomponent I.2. Basic sanitation	100	0	100	16,67%
Subcomponent 1.3 Improving municipal transport system road infrastructure	300	0	300	50,00%
Total	**600**	**0**	**600**	**100%**

1.40 **Eligibility criteria.** The eligibility criteria and items to be financed are described in detail in the program Credit Regulations (optional link 3), and are summarized as follows: (i) municípios will have a population of up to 500,000 inhabitants; (ii) municípios will have loan payment capacity for an operation with Banco do Brasil, pursuant to that institution's methodology, which has already been approved by the Ministry of Finance; and (iii) the maximum subloan limit, based on the município's population size, will be observed: US$1 million for municípios with up to 20,000 inhabitants; US$2 million for those with between 20,000 and 50,000 inhabitants; and US$7 million for those between 50,000 and 500,000 inhabitants. Amounts differentiated by município size will be determined through a Banco do Brasil financial analysis of average loan payment capacity and management for investment of the funds by the municípios. The eligibility criteria for environmental and social safeguards are described in the program Credit Regulations (paragraph 2.4).

C. Key results indicators

1.41 **Expected results and indicators.** The expected results are measured in terms of: (i) average energy consumption per lighting unit in street lighting and lighting of other public spaces by the municípios served by the program; (ii) percentage losses in the water supply system of the municípios served by the program relative to the volume of water produced; and (iii) operating costs per vehicle-kilometer per year on roads maintained by program municípios. Indicators, baseline values, and annual targets are specified in Annex II, Results Matrix, and in the monitoring and evaluation plan (required link 1).

1.42 **Economic viability (optional link 1).** A program economic analysis was performed using the cost/benefit methodology for each of the program's sectors: energy, water supply, and road transport. The avoided costs methodology was used to estimate the reduction in operating costs in the following sectors: (i) energy, for which the reduction in energy consumption and maintenance costs was considered as an economic benefit; (ii) water supply, for which the reduction in water losses was

considered an economic benefit; and (iii) road transport, for which reductions in travel times and operating costs were considered economic benefits. Although the analysis was performed globally by sector, each project financed by the program will be economically viable. The following table presents the economic return indicators, calculated using a 12% discount rate: benefit/cost ratio, net present value, and internal rate of return.

Table 5. Summary of economic evaluation findings

Economic viability	Net present value (US$ million)	Benefit/cost ratio	Internal rate of return (%)
Energy	15.2	1.2	18
Water	148.5	1.6	26.4
Road transport	1,289.4	2.0	32.8
Program total	577.7	1.70	28.8

II. Financing Structure and Main Risks

A. Financing instruments

2.1 **Origin and use of funds.** The program will be structured as an investment loan under the Global Credit Operation modality. The program will be financed with resources from the Bank's Ordinary Capital in United States dollars under the Flexible Financing Facility (document FN-655-1); the program will not include local counterpart financing. The disbursement period will be five years and the eligibility criteria and other conditions governing use of the proceeds will be specified in the program Credit Regulations. Banco do Brasil may onlend Bank loan proceeds to eligible municípios within a period of 4.5 years from the date of signature of the loan contract between the Bank and Banco do Brasil.[52] The disbursement schedule is summarized in the following table.

Table 6. Disbursement schedule (US$ million)

Source of financing	Year 1	Year 2	Year 3	Year 4	Year 5	Total
IDB	50	150	200	150	50	600
%	8	25	34	25	8	100

B. Environmental and social risks

2.2 **Socioenvironmental considerations.** In accordance with the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), the program is classified as a B-13 operation (FI.II, moderate risk); therefore, ex ante classification of program impacts and risks is not possible. As the investments eligible for financing under the program are limited to the paving and rehabilitation of existing roads, and

[52] The resources are considered committed when Banco do Brasil and the sub-borrowers sign the respective subloan contracts.

to the procurement and installation of machinery, equipment, and management systems, the program neither generates physical or economic resettlement impacts on indigenous peoples or traditional communities, nor construction impacts associated with large-scale civil works. Due to the limited nature of the interventions to be financed, the risk of type 1 and 2 natural disasters were classified as "low."

2.3 The program should have manageable environmental and social impacts, which will be addressed through the program's environmental and social management system, which is described in the social and environmental management report (required link 2). The potential environmental and social risks of the program are: (i) impacts associated with the procurement, handling, and disposal of hazardous materials; and (ii) contamination by gaseous, liquid, and solid waste emissions. These impacts will be local, temporary, and can be mitigated by adopting a waste management protocol (optional link 13) included in the program Credit Regulations as part of the environmental and social management system. In addition, the borrower will ensure that each investment complies with local legislation and holds an installation permit issued by the relevant environmental and social entity, as necessary.

2.4 The program Credit Regulations (paragraph 3.6) will include the following socioenvironmental issues to be observed during the disbursement period: (i) municipal eligibility criteria; (ii) environmental, social, health, and safety eligibility criteria for program interventions; and (iii) the waste management protocol. In addition, eligible operations will not include any of the following activities: (i) expropriation, and purchase or lease of real estate or improvements; (ii) projects requiring the resettlement of families and economic activities; (iii) projects involving indigenous territory or lands; (iv) projects with potential socioenvironmental impacts that require an environmental impact assessment (EIA/environmental impact report (RIMA); (v) maintenance of paved public roads with "*Operaçaõ Tapa Buraco*"[53] techniques or similar, when there is no increase in future economic benefits or generation of a significant increase in the useful life of the asset in question; and (vi) projects classified as a category "A" operation under the Bank's Operational Policy OP-703.

2.5 A medium environmental and social sustainability risk has been identified in the potential nonfulfillment of the waste management protocol by the municípios. This will be mitigated by preparing an annex to the contract stating the borrower's commitment to implementing a waste management protocol.

C. Fiduciary risks

2.6 As a fiduciary risk inherent to execution, a delay in the implementation of eligible subprojects was identified as a medium risk, owing to the potential lack of institutional capacity in the municípios to execute the program's procurement processes. The following mitigation actions will be considered: (i) hold a course on public procurement for the municipal sub-borrowers; and (ii) identify and implement technological solutions to provide comprehensive support in project management. This mitigation measure will be implemented through the UniBB training platform, which is already operational.

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[53] The "*tapa buraco*" (pothole patching) technique aims to fill potholes that appear in the road surface for various reasons (including lack of adhesion among superimposed layers, causing layer displacement).

D. Other risks

2.7 The following medium risks were also identified: (i) integrity: (a) weaknesses in the execution and supervision capacity of some sub-borrowers may result in opportunities conducive to prohibited practices, thereby affecting the attainment of objectives and damaging the Bank's reputation, and failure to communicate the Bank's jurisdiction to investigate and sanction prohibited practices should they occur; and (ii) development: (a) investments that are unsustainable in the long term because of a lack of municipal resources to maintain them; and (b) low technical capacity among the municípios to execute the projects.

2.8 The mitigation measures are: (i) integrity: (a) the addition of specific clauses in the subloan model contract to be used by Banco do Brasil for the subloans with the eligible municípios referring to the Bank loan, the use of the Bank's procurement policy (document GN-2349-9) by the program's beneficiary municípios, and the application of the Bank's sanction procedures. In addition, monitoring and supervision tools are being developed with the Competitiveness, Technology, and Innovation Division (CTI) and the Brazil Country Office (CBR) team, deploying innovative solutions (technical assistance operation ATN/OC-16563-BR); and (ii) development: (a) preparation of draft standard design documents for inclusion in the Banco do Brasil subloan model contract with sub-borrowers, as well as a long-term maintenance plan; and (b) training and procurement courses for municípios provided through UniBB (optional link 12).

III. Implementation and Management Plan

A. Summary of implementation arrangements

3.1 **Execution.** Banco do Brasil will be the program borrower and executing agency, and the Federative Republic of Brazil will serve as guarantor. The guarantee in question will be limited to Banco do Brasil's financial obligations under the loan (including the payment of principal, interest, and other lending charges) but will not cover physical performance obligations or local counterpart contributions.

3.2 **Partial exception to the Policy on Guarantees Required from the Borrower (document GP-104-2).** It is proposed that the Bank's Board of Executive Directors approve a partial waiver of the Bank's policy on the guarantees to be presented by the borrower (document GP-104-2),[54] so that the guarantee provided by the Federative Republic of Brazil is partial and only covers the borrower's financial obligations in terms of loan payments (principal, interest, and other lending charges). The justification for this request is that Brazilian law has no express legal provision that permits Brazil's federal government to provide a guarantee that also covers program execution performance obligations and the borrower's local contribution. Nonetheless, the borrower is a solvent entity with ample financial capacity relative to the obligations it will assume with the Bank.

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[54] Banco do Brasil is a financial institution with ample financial and execution capacity relative to the obligations it will assume with the Bank. This practice has been followed in all previous IDB financing operations with BNDES, including loans 1608/OC-BR, 1860/OC-BR, 2023/OC-BR, 2236/OC-BR, BR-L1442, and other operations financed by the Bank in Brazil, such as loan BR-L1490 with the Research and Projects Financing Agency (FINEP).

3.3 **Financial situation of Banco do Brasil.** An analysis by the federal government shows that Banco do Brasil is in a position to contract a loan with the IDB. The performance analysis for the fourth quarter of 2017[55] shows that Banco do Brasil performed solidly in 2017: (i) total operating income of US$29.940 billion; and (ii) net income of US$3.470 billion,[56] with stable and positive evaluations by the rating agencies. Banco do Brasil thus has financial capacity commensurate with the obligations it would assume with the Bank.

3.4 The Banco do Brasil Governing Board (DIGOV) will be responsible for coordinating, planning, monitoring, and executing the activities of projects and actions financed with Bank resources under the program. It will receive technical support in this endeavor from professionals assigned to the DIGOV itself, as well as operational support from other areas of Banco do Brasil, as described in the program Credit Regulations. The DIGOV will act as the program coordinator and project manager, and will be the official interlocutor with the Bank, and have the following functions: (i) coordinate the program's technical, administrative, and fiduciary activities; (ii) approve the program's physical and financial programming, progress reports, disbursement requests, and the issuance of accounts for program expenditures; and (iii) coordinate program evaluation.

3.5 Program coordination by DIGOV will follow processes previously used by Banco do Brasil in its operations with the municipal public sector. DIGOV will consolidate managerial data on support, supervision and monitoring of procurement processes and services. Management reports will be submitted to the Bank in the form of quarterly reports.

3.6 **As a special contractual condition precedent to the first disbursement of the loan proceeds. As a special contractual condition precedent to the first disbursement of the loan proceeds, the program Credit Regulations will have been approved and entered into effect under the terms agreed upon with the Bank,** to ensure effective execution. The program Credit Regulations specifies the criteria for municípios to be eligible for subloans, as well as other technical and administrative aspects that regulate the program (paragraph 2.4).

3.7 **Procurement of works, goods, and services.** As this is a loan to be used by Banco do Brasil in its role as a development finance intermediary, in which it will make subloans to municípios (public sub-borrowers), procurement will be undertaken using the Policies for the Procurement of Works and Goods financed by the Inter-American Development Bank (document GN-2349-9). The subloan contracts will include provisions referring to the list of goods and/or services to be financed (procurement plan), along with eligibility, fraud, and corruption clauses. No works financing is envisioned. Considering the nature of the program, the experience of Banco do Brasil, and use of the online auction system, the procurement of machinery and equipment is expected to take up to one month on average, and procurement of other items to be financed will be implemented in periods of up to six months.

3.8 **Retroactive financing.** The Bank may draw on the loan proceeds to retroactively finance up to US$120 million (20% of the proposed loan amount) in eligible

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[55] Banco do Brasil. Performance analysis – 2017 fourth quarter.

[56] Exchange rate used US$1 = R$3.20.

expenses incurred by Banco do Brasil on eligible projects before the loan is approved by the Board of Executive Directors. The expenditures in question must have satisfied requirements substantially analogous to those specified in the loan agreement and have been incurred on or after March 22, 2018 (the project profile approval date), but in no circumstances more than 18 months before the loan was approved by the Bank's Board of Executive Directors.

3.9 **Ex post review.** Documentation in support of the disbursements and the expenses made with the subloans to the municípios will be subject to periodic ex post review.

3.10 **Audit.** Banco do Brasil will present the Bank with an audited financial report on the operation every year no later than 120 days after account closing. The report will be certified by an external auditing firm acceptable to the Bank, preferably the firm that audits Banco do Brasil, if eligible, or else by the Office of the Comptroller General of the Union (CGU). The audited financial statements will be prepared under the terms of reference previously agreed upon with the Bank.

3.11 **Commitment on encumbrances.** At the request of Banco do Brasil, it was agreed that some changes would be made to the wording of the borrower commitment on encumbrances clause for this operation, contained in the General Conditions of the loan contract. Ordinarily, Banco do Brasil would commit to creating a security interest on its assets in favor of the Bank, in the event it pledged such assets to secure external debts with third parties. For this operation, however, Banco do Brasil will instead have a Bank-issued limited waiver of that clause, enabling it to establish specific types of encumbrances on its external debt, thereby eliminating the need to create equivalent encumbrances in favor of the Bank. This special arrangement is considered acceptable given the nature of Banco do Brasil as an open-stock, semipublic financial institution, which operates as a commercial bank and sources funds in the domestic and international markets with financial institutions operating in those markets. The standard commitment on encumbrances clause potentially poses an excessive restriction on Banco do Brasil's business activities. Notably, the arrangement with Banco do Brasil is based on previous Bank agreements involving this clause with similar institutions.[57] Furthermore, Banco do Brasil is financially sound and has its own capital. It has ample operational and financial capacity with respect to the obligations it has assumed with the Bank. Consequently, this arrangement is not anticipated to impact the borrower's ability to repay the loan (paragraph 1.16).

B. Summary of monitoring results arrangements

3.12 **Program monitoring and supervision.** The DIGOV will use the physical-financial schedule and the results matrix to monitor program execution. It will prepare semiannual progress reports, containing the information needed to complete the program monitoring report. The DIGOV will use a management information system supplied through the monitoring platform (optional link 11) to record all technical information, contracts, and program expenses, thereby generating data for

[57] Such an arrangement was reached with Banco de la República Oriental del Uruguay (BROU). Accordingly, in the context of loan 3396/OC-UR (Financial Program for Productive Development), agreement was reached on a limited waiver of the commitment on encumbrances, enabling the BROU to establish specific encumbrances without having to create equivalent encumbrances in favor of the Bank. This arrangement was also meant to avoid limiting the ordinary conduct of the BROU's business activities.

monitoring and tracking. The Bank is already deploying innovative technologies to monitor and supervise operations. Examples include Infradinamica (Infradinamica - La Paz App) in Bolivia to monitor road construction works; and the Smart Water Management Pilot Program in the Bahamas (nonreimbursable technical cooperation operation GRT/MC-16556-BH) for the transition of efficient water metering technology, with a view to benefiting consumers and increasing efficient water management.

3.13 Banco do Brasil will supervise the operation through reports and/or onsite visits by its department that already has this responsibility in other operations, such as the São Paulo Operations Center (CENOP-SP), for which the operational details are described in the program Credit Regulations.

3.14 **Program evaluation.** The results of the program will be assessed in two evaluations (midterm and final), the details of which are set out in the program Credit Regulations. The monitoring and evaluation indicators are specified in the monitoring and evaluation plan (required link 1). The borrower will prepare a midterm evaluation report and send it to the Bank within 90 days after the end of the third year of program execution, or when 50% of the loan proceeds have been disbursed, whichever occurs first. It will also send the Bank a final evaluation 90 days from the date of the final disbursement of the loan proceeds. The evaluation methodology will compare changes in the results matrix outcome indicators before and after program actions. The objective of the evaluation is to judge whether the program has achieved the results expected and benefits envisaged when it was approved. The ex post economic evaluation will review a minimum representative sample of 30% of the projects that were financed by the program in each subsector, to confirm whether or not the economic results estimated ex ante have been attained. The ex post evaluation methodology is described in the annex to the monitoring and evaluation Plan and in the program Credit Regulations, and it is similar to that used in the initial evaluation, where the sample projects represented the returns of each type of project, based on data observed after project completion. Banco do Brasil will finance final evaluation.

Development Effectiveness Matrix		
Summary	BR-L1503	
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Gender Equality and Diversity -Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Reduction of emissions with support of IDBG financing (annual million tons CO2 e)* -Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2850	Strengthen the institutional capacity of public entities; Improve infrastructure conditions
Country Program Results Matrix	GN-2915-2	The intervention is included in the 2018 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution	7.7	
3.1 Program Diagnosis	3.0	
3.2 Proposed Interventions or Solutions	1.7	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	10.0	
4.1 Program has an ERR/NPV, or key outcomes identified for CEA	3.0	
4.2 Identified and Quantified Benefits and Costs	3.0	
4.3 Reasonable Assumptions	1.0	
4.4 Sensitivity Analysis	2.0	
4.5 Consistency with results matrix	1.0	
5. Monitoring and Evaluation	8.5	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	6.0	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Medium	
Identified risks have been rated for magnitude and likelihood	Yes	
Mitigation measures have been identified for major risks	Yes	
Mitigation measures have indicators for tracking their implementation		
Environmental & social risk classification	B.13	
IV. IDB´s Role - Additionality		
The project relies on the use of country systems		
Fiduciary (VPC/FMP Criteria)	Yes	Financial Management: Budget, Treasury, Accounting and Reporting, External Control, Internal Audit.
Non-Fiduciary	Yes	Strategic Planning National System, Monitoring and Evaluation National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project		

Note: (*) Indicates contribution to the corresponding CRF's Country Development Results Indicator.

Evaluability Assessment Note

This operation is a global credit loan for US$600 million that will finance a line of credit of the Bank of Brazil (BB) to small and medium-sized municipalities (less than 500,000 inhabitants), and that have adequate repayment capacity. The program is multisectoral, financing investments in energy efficiency (public lighting and government buildings), reduction in leakages in municipal water systems, and maintenance and paving of roads. These investments in infrastructure by the municipalities are very relevant: the program is expected to reduce water leakages by more than 10%, energy consumption in public spaces and government buildings by almost 60%, and almost 20% the costs of operating vehicles in the beneficiary municipalities. The challenge faced by the municipalities that are the target of the project is the difficulty in accessing financing to make these investments. The project has a good diagnosis and vertical, and the expected results are reasonable. A challenge faced by the BB is monitoring the results of its loans, and the IDB, with this project and with technical cooperations connected to the project, proposes to design a process that incorporates modern technologies allowing the monitoring of the results of the financed projects. These improvements in the results monitoring process could have positive impacts on BB operations', beyond the scope of this project.

The economic analysis is adequate, with reasonable assumptions, and adequate sensitivity analysis. The internal rate of return of the project is 28.8%.

The project proposes to carry out an ex-post economic evaluation that should provide information on the observed economic efficiency of the project, but it does not allow for an empirical measurement of its impacts. The improvement of the monitoring capabilities of results by BB should help the ex post economic evaluation to clearly include the benefits observed at the end of the program.

RESULTS MATRIX

Program objective:	The program objective is to improve and enhance the efficiency of municipal infrastructure and public services, through investments and innovative solutions financed with a Banco do Brasil credit line. Its specific objectives are to: (i) improve the energy efficiency of public lighting and public buildings; (ii) reduce physical and commercial water losses; and (iii) upgrade the road infrastructure of municipal transportation systems.

EXPECTED OUTCOMES

Outcome indicators	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Target year	Means of verification	Comments
Outcome 1: Improved energy consumption economy for lighting streets and public spaces												
Average energy consumption by the municípios served by the program per lighting unit in the lighting of streets and public spaces	MWh	815.7	2017						336.3	2023	Banco do Brasil execution report	Municípios will send data semiannually to Banco do Brasil for consolidation
Outcome 2: Reduction in water losses in municipal water supply systems												
Percentage loss rate in the water supply system relative to the volume of water produced, in the municípios served by the program	%	40	2017						35%	2023	Banco do Brasil execution report	Municípios will send data semiannually to Banco do Brasil for consolidation
Outcome 3: Reduction in road infrastructure operational costs in the municípios												
Operating costs per vehicle kilometer per year on roads maintained by the program municípios	US$ per km/year	303.3	2017						248.3	2023	Banco do Brasil execution report	Municípios will send data semiannually to Banco do Brasil for consolidation

OUTPUTS

Outputs	Unit of measure	Baseline	Baseline year	Year 1	Year 2	Year 3	Year 4	Year 5	Final target	Means of verification	Comments
Component 1. Improvement of municipal infrastructure											
Number of projects supported by PROGEINFRA Projects supported with energy-efficiency actions Projects supported with road infrastructure actions Projects supported with actions to reduce water losses	Unit	0	2017	17	54	73	54	17	215	Banco do Brasil execution report	
Mechanisms for the technical analysis of established sector projects	Unit	0	2017	1	0	0	0	0	1	Banco do Brasil execution report	Financed with IDB technical cooperation funds
Standard designs for presenting Banco do Brasil projects	Unit	0	2017	1	0	0	0	0	1	Banco do Brasil execution report	Financed with IDB technical cooperation funds
Update of Banco do Brasil's gender baseline and policy, and gender strengthening activities with sub-borrowers	Unit	0	2017	0	0	1	0	0	1	Banco do Brasil execution report	Financed with IDB technical cooperation funds

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country:	Brazil
Project number:	BR-L1503
Project name:	Public Infrastructure Management Investment Program for Municipal Efficiency (Municipal Efficiency Program)
Executing agency:	Banco do Brasil S.A. (Banco do Brasil)
Fiduciary team:	Karina Diaz and Santiago Schneider (VPC/FMP)

I. EXECUTIVE SUMMARY

1.1 Banco do Brasil S.A. is an open-stock, semipublic company under private law, which is governed by the Law on Joint Stock Companies (Law 6,404 of 15 December 1976). It is one of Brazil's five federal state banks and the main source of financing for the country's municípios. Banco do Brasil's majority shareholder is the Federative Republic of Brazil.

1.2 With over 66,000 points of service distributed across branches and a shared network, and a presence in 99.8% of the country's municípios, Banco do Brasil has the country's largest service network. In 2017, it created the Municipal Efficiency Program as a vehicle for lending to municipal public managers to enable them to enhance their infrastructure efficiency, through innovative solutions. This Bank operation will complement the financing of municipal credit operations that draw on the Municipal Efficiency Program credit line.

1.3 The institutional assessment of the program's fiduciary management was based on: (i) the country's current fiduciary context; (ii) the findings of the Institutional Capacity Assessment Platform (ICAP) assessment; (iii) an analysis of the main fiduciary risks; and (vi) working meetings between the Bank's project team and Banco do Brasil.

II. FIDUCIARY CONTEXT OF THE EXECUTING AGENCY

2.1 Banco do Brasil will be the borrower and also serve as the program's executing agency. The operation will be executed through the Banco do Brasil Governing Board (DIGOV), which will be responsible for coordinating, planning, monitoring, and executing activities related to the projects and actions financed with Bank resources.

2.2 In 2017, Banco do Brasil created the Municipal Efficiency Program, coordinated, and executed by a DIGOV technical team. The Municipal Efficiency Program will be coordinated by that same technical team, which has the experience and capacity needed to absorb the additional workload involved in executing this Bank-financed operation. The Bank will support Banco do Brasil in creating and consolidating identification, monitoring, and evaluation capabilities for medium- and

long-term investment credits, to improve Banco do Brasil's institutional capacity, through technical cooperation programs that have already been approved, or are in the process of approval, by the Bank.

2.3 Banco do Brasil will be responsible for making subloans to the program's eligible municípios, financed from the loan proceeds. The maximum subloan amount will not exceed US$7 million. As Banco do Brasil is a borrower whose majority shareholder is the Federative Republic of Brazil, national laws on public administration are applicable, including the Fiscal Responsibility Law and Law 8,666 of 1993. The laws in question will also apply to municipal sub-borrowers.

2.4 In terms of accountability and regulations, Banco do Brasil is subject to control and supervision by a number of federal agencies, including the Ministry of Finance, the Central Bank of Brazil, the Securities Commission, the Federal Public Ministry, the Ministry of Transparency, the Office of the Comptroller General of the Union (CGU) and the Federal Audit Office (TCU).

III. Institutional Capacity Assessment, Fiduciary Risk, and Mitigation Actions

3.1 The ICAP assessment, and its validation with Banco do Brasil and the main related stakeholders, concludes that Banco do Brasil has a high level of institutional fiduciary capacity and experience in executing operations similar to the one being financed with the loan proceeds.

3.2 Delays in the execution of eligible subprojects were identified as a potential fiduciary risk, owing to a potential lack of capacity among the municípios to execute the program's procurement processes. The following actions will be taken to mitigate this risk: (i) a course on public procurement for municipal sub-borrowers will be held; and (ii) technological solutions for comprehensive project management support will be identified and implemented. This mitigation measure will be implemented through the training platform of the Banco do Brasil Corporate University (UniBB), which is already up and running.

IV. Considerations for the Special Provisions of the Contracts

4.1 **Special contractual conditions precedent to the first disbursement of the loan proceeds.** No fiduciary conditions precedent were identified apart from the standard contractual conditions.

V. Agreements and Requirements for Procurement Execution

5.1 The fiduciary agreements and requirements for procurement specify the provisions applicable to all procurement processes envisaged under the program.

5.2 **Procurement execution.** As this is a loan to be used by Banco do Brasil in its development finance intermediary role, in which it will onlend to municípios (public sub-borrowers), procurement processes will be executed by the latter. The subloan contracts will include provisions referring to the list of goods and/or services to be financed (procurement plan), along with eligibility, fraud, and corruption clauses.

5.3 **Procurement of works, goods, and nonconsulting services.** The procurement and contracting of goods and nonconsulting services will be carried out by the sub-borrowers, in amounts not to exceed those specified for national processes, using the online auction system as a contracting mechanism. No works financing is anticipated.

5.4 **Selection and contracting of consultants.** In accordance with the Municipal Efficiency Program's Credit Regulations, consulting services are not eligible for financing from subloan proceeds.

5.5 **Use of the country procurement system.** The country procurement (sub)system approved by the Bank (online auction system) will be used to procure off-the-shelf goods for up to US$5 million. Any system or subsystem that may be approved by the Bank subsequent to the date on which the loan has been approved by its Board of Executive Directors will apply to the operation.

5.6 **Retroactive financing.** The Bank may draw on the loan proceeds to retroactively finance up to US$120 million (20% of the proposed loan amount) in eligible expenses incurred by Banco do Brasil on eligible projects before the loan is approved by the Board of Executive Directors. The expenditures in question must have satisfied requirements substantially analogous to those specified in the loan agreement and have been incurred on or after March 22, 2018 (the project profile approval date), but in no circumstances more than 18 months before the loan was approved by the Bank's Board of Executive Directors.

5.7 **Direct contracting.** No direct contracting is anticipated.

5.8 **Recurring costs.** No recurring costs are anticipated.

5.9 **National preference margin.** None, given the execution arrangements.

5.10 **Procurement supervision.** As the municípios will execute procurement through the country system, supervision will also be done through that system.

5.11 **Records and files.** Files will be kept in the executing agency's offices under the corresponding security and surveillance conditions, duly identified by operation, ordered chronologically, and by eligible sub-borrower.

VI. FINANCIAL MANAGEMENT

A. Programming, budget, and accounting

6.1 Banco do Brasil uses its own "in-house" system as the main tool for record keeping, budget monitoring and execution, and accounting. This is an integrated, auditable, and secure system, in which transactions are identified by both origin and source. This flexible system allows for the issuance and preparation of specific reports to monitor operations. Banco do Brasil systems have been audited by the pertinent control agencies and external auditors. These systems observe the national regulations issued by the Central Bank of Brazil, including the accounting system of the institutions of Brazil's financial system, which specifies the accounting criteria and procedures to be observed by financial institutions authorized to operate by the Central Bank of Brazil.

6.2 Specific reports will be prepared for this operation, to facilitate program management and monitoring, and to issue financial statements denominated in U.S. dollars.

B. Disbursements and cash flow

6.3 Disbursements will be made in U.S. dollars to reimburse eligible expenditures financed with Banco do Brasil's own funds. Reimbursements will be paid into a specific Banco do Brasil account held abroad and will be reviewed ex post.

6.4 The advance of funds modality may be used in certain cases, based on a projection of disbursements for up to 180 days, presented by Banco do Brasil and supported by eligible contracts already signed. For future advances, at least 80% of the previously advanced funds must be accounted for. Advances of funds will be paid into a Banco do Brasil account in the name of the program.

6.5 The exchange rate agreed upon with the executing agency to record advances of the loan proceeds will be the internalization rate; and the exchange rate used to determine the local currency equivalent of reimbursements charged to the loan will be the rate prevailing on the day before the reimbursement request is submitted to the Bank.

6.6 Expenses considered ineligible by the Bank must be paid with other funds at the Bank's discretion, depending on the nature of the ineligibility.

C. Internal control and internal audit

6.7 The Banco do Brasil audit committee reports directly to its executive board, which oversees the activities of its internal control area. Banco do Brasil's organizational chart includes a vice presidency for internal controls and risk management, which has a specific unit, the internal controls department, in charge of the regulation, validation, and supervision of internal controls. An executive committee on internal controls and operational risk is also in place for this purpose.

6.8 Banco do Brasil uses the methodology of the Committee of Sponsoring Organizations (COSO) to ensure that control environment, risk assessment, control, information and communication activities, and activities monitoring components are all present, functioning, and interrelated.

6.9 The internal audit team coordinates its work plan with national control agencies such as the CGU. The operation will be included among the activities of Banco do Brasil's internal audit team.

D. External control and reporting

6.10 Banco do Brasil is audited annually by the two national oversight agencies, the TCU and CGU; it is also supervised by the Central Bank of Brazil and the Securities Commission. An external audit firm (currently KPMG) audits the institution's annual financial statements.

6.11 Banco do Brasil will file an audited financial report for the operation with the Bank every year no later than 120 days after account closing. The report will be certified by an external auditing firm acceptable to the Bank, preferably the firm that audits Banco do Brasil, if eligible, or else by the CGU. The audited financial statements will be prepared under terms of reference previously agreed upon with the Bank.

6.12 Banco do Brasil's audited financial statements are published on its website every quarter.

E. Financial supervision plan

6.13 This plan may be altered during project in response to evolving risk levels or for additional control needs.

Table 1. Supervision plan

Nature/scope	Frequency	Responsible party	
		Bank	Executing agency
Ex post review of disbursements and procurement	Annual	Fiduciary team	Program coordination unit, external auditor, and CGU
Annual audit	Annual	Fiduciary team	Program coordination unit, external auditor, and CGU
Review of disbursement requests	Periodic	Fiduciary team	
Supervision visit	To be determined	Sector specialist and fiduciary team	

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-__/18

Brazil. Loan ____/OC-BR to Banco do Brasil S.A. Public Infrastructure Management Investment Program for Municipal Efficiency (Municipal Efficiency Program)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with Banco do Brasil S.A., as Borrower, and with the Federative Republic of Brazil, as Guarantor, for the purpose of granting the former a financing aimed at cooperating in the execution of the Public Infrastructure Management Investment Program for Municipal Efficiency (Municipal Efficiency Program). Such financing will be for the amount of up to US$600,000,000 from the resources of the Bank's Ordinary Capital, and will be subject to the Financial Terms and Conditions and the Special Contractual Conditions of the Project Summary of the Loan Proposal.

(Adopted on ___ _____ 2018)

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