

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

BRAZIL

**CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP)
FOR THE PROMOTION OF INNOVATION**

(BR-00004)

**FIRST INDIVIDUAL OPERATION UNDER THE CCLIP:
INNOVATION FOR GROWTH PROGRAM**

(BR-L1490)

LOAN PROPOSAL

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ABBREVIATIONS

AUDI	Auditoria Intera da FINEP [FINEP Internal Audit Unit]
AWP	Annual work plan
BNDES	Banco Nacional de Desenvolvimento Econômico e Social [National Economic and Social Development Bank]
CCLIP	Conditional Credit Line for Investment Projects
CGU	Controladoria-Geral da União [Office of the Comptroller General of the Union]
CNI	Confederação Nacional da Indústria [National Confederation of Industry]
DAUD	Departamento de Auditoria [Audit Department]
ECLAC	Economic Commission for Latin America and the Caribbean
FINEP	Financiadora de Testudos e Projetos [Research and Projects Financing Agency]
FNDCT	Fundo Nacional de Desenvolvimento Científico e Tecnológico [National Fund for Scientific and Technological Development]
IBGE	Instituto Brasileiro de Geografia e Estatística [Brazilian Institute of Geography and Statistics]
ICAS	Institutional Capacity Assessment System
ICB	International competitive bidding
IMF	International Monetary Fund
IPEA	Institute of Applied Economic Research
LIBOR	London Interbank Offered Rate
MCTIC	Ministério da Ciência, Tecnologia, Inovações, e Comunicações [Ministry of Science, Technology, Innovation and Communications]
MSMEs	Micro, small, and medium-sized enterprises
N/A	Not applicable
NCB	National competitive bidding
NPV	Net present value
OECD	Organization for Economic Cooperation and Development
PINTEC	Pesquisa de Inovação Tecnológica [Brazilian Survey of Technological Innovation]
PMU	Program management unit
R&D	Research and development
SMEs	Small and medium-sized enterprises
S&T	Science and technology
STI	Science, technology, and innovation
TCU	Tribunal de Contas da União [Federal Audit Office]
TFP	Total factor productivity
WEO	World Economic Outlook

PROJECT SUMMARY
BRAZIL
CONDITIONAL CREDIT LINE FOR INVESTMENT PROJECTS (CCLIP)
FOR THE PROMOTION OF INNOVATION
(BR-O0004)

FIRST INDIVIDUAL OPERATION UNDER THE CCLIP: INNOVATION FOR GROWTH PROGRAM
(BR-L1490)

Financial Terms and Conditions					
Borrower: Financiadora de Estudos e Projetos [Research and Projects Financing Agency] (FINEP)			Flexible Financing Facility^(a)		
			Amortization period:	25 years	
Guarantor: Federative Republic of Brazil			Disbursement period:	5 years	
			Grace period:	5.5 years ^(b)	
Executing agency: FINEP			Interest rate:	LIBOR-based	
Source	CCLIP (US\$ million)	First loan (US\$ million)	%	Credit fee:	(c)
IDB (Ordinary Capital):	1,500	600	85	Inspection and supervision fee:	(c)
Local:	N/A	103.6	15	Original weighted average life:	15.25 years
Total:	1,500	703.6	100	Currency of approval:	U.S. dollars from the Ordinary Capital
Project at a Glance					
<p>Program objective/description: The CCLIP's objective is to boost the productivity of Brazilian enterprises by encouraging greater private sector investment in innovation and invigorating the National Innovation System.</p> <p>The overall objective of the first individual operation under the CCLIP is to foster productivity gains by promoting investment in innovation. The specific objectives are to: (i) increase investment in innovation of companies in priority sectors; (ii) increase technology adoption among micro, small and medium-sized enterprises (MSMEs) with innovative potential; (iii) facilitate the growth of dynamic business ventures; and (iv) strengthen FINEP institutional capacity to design, monitor, and evaluate strategic projects.</p>					
<p>Special contractual conditions precedent to the first disbursement: (i) Establishment of the program management unit (PMU) and its respective functions, as described in the program's Operating Regulations; and (ii) FINEP approval of the program Operating Regulations and its annexes, including environmental and social management procedures, in accordance with the Bank's safeguard policies, pursuant to the draft previously agreed upon with the Bank (paragraph 3.5). For special contractual conditions precedent to the first disbursement involving socioenvironmental issues, see paragraph B of the Environmental and Social Management Report.</p>					
<p>Exceptions to Bank policies: FINEP will be the borrower and executing agency. The guarantee, provided by the Federative Republic of Brazil, will be limited to FINEP's financial obligations under the loan (including the repayment of principal, interest payments, and other lending charges). However, it does not cover performance obligations or the local counterpart contribution. It is therefore proposed that the Board of Executive Directors approve a partial waiver of the Bank Policy on Loan Guarantees (document GP-104-2) required from the borrower (paragraph 3.1).</p>					
Strategic Alignment					
Challenges:^(d)		SI <input type="checkbox"/>	PI <input checked="" type="checkbox"/>	EI <input type="checkbox"/>	
Crosscutting themes:^(e)		GD <input type="checkbox"/>	CC <input checked="" type="checkbox"/>	IC <input type="checkbox"/>	

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

(e) GD (Gender Equality and Diversity); CC (Climate Change and Environmental Sustainability); and IC (institutional Capacity and Rule of Law).

I. DESCRIPTION AND RESULTS MONITORING

A. Background, problem, rationale

- 1.1 **Background.** Brazil faces the challenges of accelerating its economic growth and paving a solid path forward to sustainable and inclusive development in the long term. Accordingly, it will need to focus on closing the productivity gaps that separate it from more advanced countries. This means implementing initiatives that promote sustained gains in productivity, which are achieved in part through increased investment in business innovation. Science, technology, and innovation (STI) policies can help Brazil address these economic growth and productive-sector strengthening challenges.
- 1.2 The federal government has therefore decided to strengthen STI financing in Brazil by requesting Bank support for a program to promote innovation for economic growth. Accordingly, the Bank would provide technical support and financial resources to FINEP, an agency of the Ministry of Science, Technology, Innovation, and Communications (MCTIC). The request for financing is structured as a CCLIP for up to US\$1.5 billion. This, the Innovation for Growth Program, is the first individual operation under the CCLIP for a total of US\$703.6 million. Of this amount, the Bank will finance US\$600 million and FINEP US\$103.6 million.
- 1.3 **Macroeconomic context.** The Innovation for Growth Program comes at a critical time for Brazil's economy, which is in need of a new growth strategy to reverse the course of rapid and severe deterioration observed in recent years. Despite posting economic growth of 7.5% in 2010, Brazil closed 2016 among the world's five lowest-performing economies, with a 3.6% contraction in GDP;¹ this after shrinking 3.8% in 2015, the most profound contraction of the country's economy in the last 25 years.² This has clearly had an impact on per capita income, which fell from US\$15,281 in 2013 to US\$14,454 in 2015.³ The deterioration of the Brazilian economy has also resulted in a doubling of the unemployment rate, high inflation (exceeding the targets of the Central Bank of Brazil), and a real interest rate that remains one of the world's highest (7.3%),⁴ with a corresponding adverse impact on capital investment. Consequently, the fiscal deficit and burden of public debt have increased, resulting in a downgrading of the country's credit rating.⁵ Changes to the growth strategy adopted by Brazil in recent decades are therefore essential if the country is to attain sustainable and inclusive levels of development in the long term.⁶
- 1.4 The underlying problem of the Brazilian economy is not low growth rates or the recent recession, but rather the prolonged period of low-productivity gains. Compounding this is the fact that Brazil missed the opportunity to take proper advantage of the tailwinds associated with favorable conditions in the commodities market to finance higher levels of investment—a key determinant of long-term

¹ [Central Bank of Brazil \(BCB\)](#).

² [World Economic Outlook \(WEO\)](#), International Monetary Fund (IMF), 2016.

³ [World Bank](#).

⁴ See [global ranking of real interest rates](#).

⁵ The sector's net debt grew from 35.6% of GDP in 2015 to 46% in 2016 ([Central Bank of Brazil, 2017](#)).

⁶ The government's fiscal deficit, corruption scandals, and political and institutional instability have all played a role in weakening of the economy.

growth.⁷ Brazil's growth strategy, based on expanding consumption, leveraging the comparative advantages of available raw materials, and low-cost production factors, has proven unsustainable over time (Institute of Applied Economic Research (IPEA), 2014). Nor has Brazil managed to increase investment in business innovation—a key determinant of productivity gains and structural change.⁸

- 1.5 **The problem Brazil aims to address with the CCLIP.** Brazilian productivity has not grown in a sustained way since the late 1970s.⁹ Although the economy expanded at an average rate of 4.4% between 2004 and 2010, growth in total factor productivity (TFP) never surpassed 2% annually and has basically flatlined since 2011,¹⁰ with average annual growth of just 0.6%. Taking the United States as the international benchmark for technology, this gap has been widening, with Brazil's average productivity vis-à-vis the United States slipping from 76% in 1974 to 46% in 2014.¹¹ Not only does this suggest that expectations for sustained growth in Brazil will be modest in the coming years, but that the per capita income gap relative to developed countries will continue to widen unless urgent action is taken to address the problem of TFP stagnation. Productivity gaps have also widened with emerging-economy countries that have been consistently working to raise their efficiency levels.¹² The situation is even more alarming when considering industry's performance—a sector seen as crucial for structural change and economic development. The productivity of Brazilian industry has declined 1.3% per year since 1997. This explains why Brazil's industrial production decreased by 20% between 2010 and 2016, while such production increased worldwide by the same percentage.¹³ This reflects the economy's loss of competitiveness,¹⁴ since industrial goods as a percentage of exports has fallen,¹⁵ the import-penetration ratio of industry's imported inputs has increased,¹⁶ and industry's share of GDP has fallen 10 percentage points in 30 years.¹⁷ Low productivity performance and the lack of innovation capacity are the epicenter of Brazil's loss of competitiveness.¹⁸ Accordingly, these challenges have prompted the government to request Bank support.

⁷ Investment levels remained virtually unchanged at 19% of GDP during the period, while infrastructure investment increased by no more than 0.4 percentage points of GDP. Institute of Applied Economic Research (IPEA), 2014.

⁸ Griliches (1979); IDB, 2010; WEO, IMF (2016).

⁹ Bonelli, (2016).

¹⁰ Brazil's Industrial Development Research Institute (IEDI), 2014.

¹¹ Calculations based on Penn World Table 9.0, following the [Fernández-Arias \(2014\)](#) methodology.

¹² Brazil's labor productivity indicator was US\$28,500 in 2015, compared to US\$117,900, US\$87,900 and US\$73,200, respectively, in the United States, Germany, and Japan. Emerging-economy countries have also surpassed Brazil: South Korea (US\$70,500), Russia (US\$48,300), Malaysia (US\$57,100) and South Africa (US\$42,500) (IPEA, 2016).

¹³ National Bank for Economic and Social Development (BNDES), 2017.

¹⁴ Between 2012 and 2016, Brazil has dropped 33 places in the Global Competitiveness Ranking of the World Economic Forum, from 48th to 81st.

¹⁵ From 54% in 2003 to 36% in 2016.

¹⁶ From 15% in 2003 to 26% in 2016, National Confederation of Industry (CNI), 2016.

¹⁷ From 22% in 1985 to 9% in 2015, the same position as in 1947 (CNI, 2017).

¹⁸ Faleiros, Nakaguma, and Silva (2016); Velloso et al. (2017); Reis and Souza (2015); and Campelo Jr. and Sales (2011).

- 1.6 To foster long-term inclusive and sustainable growth, the Brazilian government will need to implement public policy actions that address the structural problems of productivity, including: (i) the shortage of private investment in innovation; (ii) the productive structure's low levels of complexity; (iii) high structural heterogeneity; and (iv) insufficient entrepreneurial growth.
- 1.7 **Gaps in private-sector investment in innovation.** Innovation is a key to increasing business productivity.¹⁹ However, Brazil's investment in innovation is low: spending on research and development (R&D) accounted for 1.2% of GDP in 2014, well below the 2.4% average of the Organization for Economic Cooperation and Development (OECD) countries.²⁰ In part, this is due to the private sector's low level of participation in R&D financing, which fell from 47% of the total in 2000 to 43% in 2012. This stands in contrast to the OECD countries, where the private sector accounts for 70% of all R&D investment.²¹ Gaps such as these mean that only a small percentage of businesses are able to bring innovation to the market. This percentage has in fact decreased from 38% in 2008 to 36% in 2014,²² which explains why Brazil ranked 69th in the 2016 Global Investment Index, and last among the BRICS—Brazil, Russia, India, China, and South Africa—countries.²³
- 1.8 More than simply a sign of weakness, investment gaps in innovation represent opportunities. Productivity among businesses that innovative is 30% higher than their counterparts, increasing to 90% if they manage to launch new products on the market. Achieving such results, however, will require addressing market failures that hinder innovation and adversely impact businesses both large and small. These failures stem from such problems as uncertainty and the presence of externalities that make it difficult for innovation projects to attract support from the conventional financial sector. In Brazil, the main obstacles to business innovation involve the high levels of economic risk, high costs, and a lack of funding sources for innovation (IBGE, 2016). These impact more than half of all businesses: small and large companies alike—60% and 50%, respectively—see them as constraints on innovation.²⁴ Such obstacles are particularly severe among less established and smaller businesses, which rely on reinvested profits and equity to finance their innovation-related activities. This assessment is consistent with the findings of a Bank study ([Estudo de Demanda por Financiamento Empresarial à Inovação](#)) and the 2016-2019 National Science, Technology, and Innovation Strategy (National Science, Technology, and Innovation Strategy),²⁵ which asserts that broadening the range of funding sources for innovation in strategic sectors and areas is the key to expanding and integrating Brazil's National Innovation System.
- 1.9 **Low levels of productive structure sophistication.** Brazil's productive structure presents low levels of complexity, ranking 56th out of 144 countries in the 2014 Economic Complexity Index, which measures the sophistication of a country's productive structure and exports. This reflects the low levels of innovation intensity

¹⁹ Organization for Economic Cooperation and Development (OECD), 2010.

²⁰ OECD, 2015.

²¹ IPEA (2016).

²² Brazilian Institute of Geography and Statistics (IBGE), 2016.

²³ [The Global Innovation Index, 2016](#).

²⁴ IBGE (2016).

²⁵ The [2019-2022 National Science, Technology, and Innovation Strategy](#), developed by the MCTIC, is the main medium-term strategic guidance document for implementing public STI policies in Brazil.

in the main sectors of the economy, the result of a premature de-industrialization process²⁶ characterized by greater specialization in commodities,²⁷ natural resources-based manufactured goods, and low-productivity services. Five products—soybeans, iron, oil, chicken, and sugar—account for 60% of Brazil's exports, all of which are at the lower end of the export-sophistication spectrum according to the Atlas of Economic Complexity.²⁸

- 1.10 Economies that have managed to boost their competitiveness have done so through policies that promote ongoing innovation in sectors where the country had productive advantages, either revealed or potential, facilitating both the export of new products and the reinvention of existing export products.²⁹ There are several paths Brazil can take to help improve the sophistication of its productive structure. The comparative advantages associated with its biodiversity and natural resource wealth can become major sources of added value by developing knowledge-intensive service industries. Sectors of the country with existing installed capacity, such as mining, biofuels, machine tools, agribusiness, and food and beverages, offer major potential for growth in higher value-added subsectors and niches.³⁰ In addition to these, there are much more dynamic sectors, such as industrial complexes in the health, chemicals, biofuels, and information and communication technology fields. Despite their strong performance, these industries have thus far been unable to gain a prominent foot hold in Brazil's export basket.
- 1.11 **Structural heterogeneity.** Brazil's productive fabric is highly heterogeneous, in which a few innovative and high-productivity enterprises coexist with many low-productivity businesses, thus perpetuating a structure of low-growth and low-innovation activities.³¹ These disparities are visible across sectors, particularly in industry, where deficient performance has eroded the country's competitive position on international markets. This has revealed two weaknesses in the Brazilian economy relative to the advanced countries. The first concerns the external gap reflecting differences in technological and innovation capabilities with respect to the international frontier.³² The second involves internal gaps that generate differences in productivity and innovation within each sector, and among different size companies. There are major productivity gaps between large and small companies: productivity in large companies is three and a half times that of small companies,³³ highlighting the major constraints MSMEs face in technology adoption.³⁴ Asymmetries of information and incomplete financial markets are among the main

²⁶ Economic Commission for Latin America and the Caribbean (ECLAC), 2016; Rodrik, 2013.

²⁷ Commodities, as a share of the country's exports, jumped from 28% to 50% between 1990 and 2014.

²⁸ Of 1,239 products listed in descending order of sophistication, Brazil's four leading exports rank 1,119th, 1,078th, 1,232nd, and 1,144th, thereby illustrating their low level of complexity. Ministry of Industry, Foreign Trade, and Services (MDIC), 2016.

²⁹ Sabel, 2012.

³⁰ Nonetheless, the innovation effort (ratio of investment in innovation to sales) in these sectors is lower than the national average. Brazilian Survey of Technological Innovation (PINTEC, 2014).

³¹ ECLAC, 2015.

³² Between 2000 and 2008, the productivity gap between the different business strata widened, with a small group of very productive enterprises (8.73%) coexisting with a large group of firms of very low or low productivity (14.49% and 25.54%, respectively) (ECLAC, 2015).

³³ This contrasts with the European Union where the productivity of small firms is 74% of that of large enterprises (ECLAC, 2013).

³⁴ For purposes of illustration, the innovation rate for SMEs is much lower than large firms: 34% and 65%, respectively.

reasons for these differences. Expanding the sources of financing for the technological modernization of smaller enterprises is essential to reducing the structural heterogeneity of the Brazilian economy.

- 1.12 **Difficulties scaling-up dynamic business ventures.** Dynamic business ventures³⁵ foster productive diversification and have a positive impact on productivity³⁶ by serving as a vehicle to promote innovation, facilitate the dissemination of knowledge, and create quality jobs. For this to occur, a suitable ecosystem is needed to virtuously combine such factors as adequate regulation, a good business climate, access to skilled human capital, technology infrastructure, and access to funding sources (see 2017 Global Entrepreneurship Index). Brazil therefore faces challenges to facilitating greater growth of its business sector.³⁷ Among the most critical phases of the entrepreneurial cycle is the so-called “valley of death”—the transition from the laboratory phase to industrial production. This phase requires early and systematic investment that will enable startups to develop their products and subsequently attract venture capital funding and other sources of private investment. Although the various links of the chain of financing for dynamic business ventures are present in Brazil,³⁸ the development of their distinct stages is uneven. Most of the financing is concentrated in the latter stages,³⁹ while the resources available for the early and intermediate stages remains insufficient. This explains why 50% of Brazilian startups fail within their first five years.⁴⁰ Supporting angel investors is crucial for spurring growth of Brazil’s business sector, since they play a pivotal role in early stages by improving business venture survival rates and their scaling. Not only do angel investors provide financial resources during the “valley of death” stage, they also contribute market knowledge, key access to customer and supplier networks, and governance experience, which improve the chances that business startups will be successful.⁴¹
- 1.13 **Rationale for the CCLIP and its first individual program.** Addressing the aforementioned problems requires a long-term vision of inclusive and sustainable growth. This will require a new generation of public policies for innovation, such as the ones implemented in the OECD countries. Brazil’s federal government, through FINEP, has therefore requested Bank support in the form of a CCLIP, with the aim of enhancing the productivity of Brazilian firms by encouraging greater private investment in innovation and invigorating the National Innovation Strategy. The CCLIP will provide Brazil with support that is sustained over time and targeted to the aforementioned challenges. It will also help improve the productive sectors’ capacity to innovate and enhance the technological development of sectors and issues

³⁵ Innovative young companies with high potential for expansion and rapid growth (IDB, 2014).

³⁶ CNI, 2016.

³⁷ São Paulo, a city renowned for its entrepreneurial ecosystem, is ranked 12th globally ([Startup Genome, 2015](#)).

³⁸ In ascending order of capital contribution: angel investors, seed capital funds, venture capital, private equity; and stock market flotation through an initial public offering (IPO).

³⁹ The amount invested in private equity is 15 times higher than that of risk capital, which shows that investments in Brazil are concentrated in the stages where technological risk is lower and the legal models are more stable. Brazilian Private Equity and Venture Capital Association (ABVCAP), 2016.

⁴⁰ The rate rises to 75% for 10 years of operations ([Fundação Dom Cabral, 2014](#)).

⁴¹ A comparison of dynamic enterprises with and without participation by angel investors shows that the former grew more, identified more market outlets, and attained better innovation indicators (Kerr, Lerner, and Schoar, 2011).

prioritized in the 2016-2019 National Science, Technology, and Innovation Strategy, thereby helping to enhance the sophistication of Brazil's productive sector. These initiatives, along with FINEP's institutional capacity building activities, will help consolidate its role as the leading public agency of STI support and funding in Brazil.

- 1.14 **Lessons learned.** The CCLIP's design has drawn on the lessons learned from innovation programs financed by the Bank and the Multilateral Investment Fund in Brazil and elsewhere in the region.⁴² The Bank has a long track record in Brazil's STI sector, and particularly with FINEP, involving numerous lending operations⁴³ and technical cooperation projects.⁴⁴ The main lessons learned from these experiences have been taken into account in the design of this program, including: (i) the comprehensive nature of the intervention, acting simultaneously in each stage of the technological innovation chain, taking into account the financial considerations and technical support services in each type of instrument; (ii) the leveraging of FINEP's existing capacity to support dynamic business venture entrepreneurship by increasing funding for companies in the "valley of death" stage; and (iii) private sector involvement in all support mechanisms with the appropriate incentives.
- 1.15 **Strategic alignment.** The operation was included under the productivity and innovation pillar in the 2017 Operational Program Report (document GN-2884). Both the CCLIP and its first operation are aligned with the IDB Country Strategy with Brazil 2016-2018 (document GN-2850) under the strategic objectives of improving the business climate and supporting the development of SMEs by addressing SME innovation funding gaps. It is also consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is strategically aligned with the development challenges of productivity and innovation by boosting productivity and corporate investments in innovation. The operation is also aligned with the crosscutting theme of climate change and environmental sustainability by supporting and evaluating the impact of FINEP instruments, and funding the advanced biofuels development and innovation plan. Roughly 19.4% of the operation's proceeds are linked to policies that will promote climate change mitigation activities, based on the multilateral development banks' joint [methodology](#) for estimating climate financing. These resources contribute to the IDB Group's goal of increasing the financing of climate change-related projects to 30% of all operational approvals by 2020 (Board of Governors Resolution AG-6/16 and document GN-2848-1). The program is also aligned with the Corporate Results Framework 2016-2019 (document GN-2727-6) through financial and nonfinancial support to MSMEs and for productivity and innovation. Lastly, it is aligned with the Sector Strategy: Institutions for Growth and Social Welfare (document GN-2587-2), by financing an increase in the innovation activities of private firms; and falls within the priority dimensions of the Innovation, Science and Technology Sector Framework Document (document GN-2791-3),

⁴² Specifically, the experience of the CCLIP in supporting technological innovation in Argentina (AR-X1015), which has been in force since 2009 and whose beneficiary is the Ministry of Science, Technology and Productive Innovation (4025/OC-BR).

⁴³ The Bank has been supporting FINEP since 1973 with the following programs: (i) 361/SF-BR, in the amount of US\$25.8 million; (ii) 250/OC-BR, US\$6.2 million; (iii) 327/OC-BR, US\$40 million; (iv) 498/SF-BR, US\$20 million; (v) 696/SF-BR, US\$42.5 million; (vi) 427/OC-BR, US\$7.5 million; (vii) 620/OC-BR, US\$100 million; and (viii) 880/OC-BR, US\$160 million.

⁴⁴ INOVAR I Program (TC/-00-1, 1-04-1-BR) in the amount of US\$1.122 billion; INOVAR II Program (BR-M1044), US\$2.678 million; and (iii) FINEP Process and Information Modernization Project (ATN/KF-12521-BR) US\$500,000.

since it finances innovation as a key to increasing productivity and economic development.

B. Objectives, components, cost

- 1.16 The CCLIP's objective is to boost the productivity of Brazilian enterprises by encouraging greater private sector investment in innovation and invigorating the National Innovation System.
- 1.17 The overall objective of the first individual operation under the CCLIP is to foster productivity gains by promoting investment in innovation. The specific objectives are to: (i) increase investment in innovation of companies in priority sectors; (ii) increase technology adoption among MSMEs with innovative potential; (iii) facilitate the growth of dynamic business ventures; and (iv) strengthen FINEP institutional capacity to design, monitor, and evaluate strategic projects. To meet these objectives, this program will be structured in four components,⁴⁵ as described below.⁴⁶
- 1.18 **Component 1: Innovation in priority sectors (US\$523 million).** The objective of this component is to increase investment in innovation by companies in seven priority sectors⁴⁷ included in the 2016-2022 National Science, Technology, and Innovation Strategy. To meet this objective, funding will be provided to business projects selected through a competitive process that aim to address scientific, technological, and innovation challenges. This support should enable the beneficiary companies to put more resources into innovation activities, especially R&D, and to develop innovative products and processes in the organizational and marketing spheres that are relevant for improving the country's productivity.
- 1.19 The component will be executed using two of the financing modalities included in FINEP's operational policy: reimbursable funding for companies, and grants for S&T (science and technology) institutions⁴⁸ and for companies.⁴⁹ Enterprise project candidates for reimbursable funding (proceeds of the loan) will be selected through the open window facility, whereas S&T institute projects and firms to be financed by

⁴⁵ The operational functioning details and execution arrangements of the components will be spelled out in the program Operating Regulations. Therefore, the approval and entry into effect of the program Operating Regulations will be a condition precedent to the first disbursement.

⁴⁶ For further details, see the program's [Vertical Logic](#).

⁴⁷ The sectors to be financed by the program are: chemical industry, mining and mineral processing, advanced biofuels, agroindustry, food and beverages, information and communication technologies, health, and the machine tool industry. These sectors were selected on the basis of federal government recommendations, as they evidence the greatest demand for support and highest technological risk. They are also STI-intensive and have a major impact on productive chains both upstream and downstream.

⁴⁸ Scientific and technological institutions are public institutes or agencies with an institutional mission to conduct basic or applied research activities of a scientific or technological nature.

⁴⁹ Under Brazilian law, nonreimbursable funding contributions to companies are considered an economic subsidy. This instrument seeks to mitigate private-sector apathy or unwillingness to exploit certain innovation opportunities that are in the public interest. This type of financing was created after the approval and regulation of the Lei de Inovação [Innovation Act] and of the Lei do Bem [Law on Incentives for Innovation]. However, since the latter involves tax incentives, this program will focus solely on the economic subsidy provided under the Innovation Act.

grants (proceeds of the local counterpart) will be selected by competitive tender.⁵⁰ This component is expected to finance roughly 80 innovation projects under the two funding modalities. The operational aspects are described in the [program Operating Regulations](#).

- 1.20 **Component 2: MSME technological innovation (US\$108.7 million).** The objective of this component is to foster greater technology adoption among MSMEs with innovative potential. The component will finance technological innovation projects related to the development of new products, processes, technology services, as well as marketing and organizational innovation. The financing of projects will be conducted through an open window facility accessible to all economic sectors covered by the 2016-2022 National Science, Technology, and Innovation Strategy. These projects will be indirectly financed by FINEP through regional and state development banks and state development agencies that have been accredited by FINEP to support innovation projects.⁵¹ The operational aspects of this component are spelled out in the [program Operating Regulations](#).
- 1.21 **Component 3: Dynamic business ventures (US\$57.6 million).** The objective of this component is to support the growth of dynamic business ventures, defined as knowledge-intensive upstarts. To meet this objective, the component will support the needs of technology-based companies in their initial stages. This support will allow them to move towards the final stages of product development, market introduction and/or expansion of their production scale.
- 1.22 The selection process will be conducted through competitive tenders, through which the beneficiary companies will sign a stock option contract with FINEP that provides financial support⁵² and/or other mechanisms to support business ventures. These will be detailed in the [program Operating Regulations](#).
- 1.23 **Component 4: Institutional strengthening and open innovation (US\$14.3 million).** The objective of this component is to strengthen the institutional capacity of FINEP to design, monitor, and evaluate strategic projects. The component will finance activities to enhance FINEP's learning capabilities and STI policies, including: (i) technological prospecting and roadmapping studies in priority sectors; (ii) impact evaluations of FINEP interventions; (iii) the implementation of pilot experiments in STI public policy and the knowledge dissemination plan; and (iv) program administration (includes resources for management, evaluation, monitoring, and audits). The operational aspects of this component are spelled out in the [program Operating Regulations](#).

⁵⁰ The financing of S&T institution innovation projects and the award of grants for enterprise innovation will be financed with the local counterpart contribution in the form of resources of the FNDCT, for which FINEP serves as executive secretariat. The general conditions for combining financing instruments will be established for each competitive tender based on the available annual budget allocation of FNDCT, and will require the Bank's no objection.

⁵¹ The development banks and development agencies that form part of the National Development System provide FINEP with the capillarity necessary to respond more appropriately to national needs.

⁵² The call option constitutes a right, but not an obligation, to purchase an asset at a future date, according to the criteria specified in a contract. In simple terms, it is a financial contract between two parties which defines the term, the amount to be paid by one of the parties, and the conversion conditions. FINEP defines it as a private contract for granting the option to subscribe to equity without restrictions on voting rights between FINEP and the applicant firm with the consent of its shareholders.

C. Key results indicators

- 1.24 **Expected impacts, outcomes, and outputs.** The program will generate positive impacts on company productivity and the recovery of capital invested in dynamic business ventures. In line with these impacts, the following outcomes are expected: (i) increased investment in innovation by beneficiary companies in strategic sectors; (ii) increased investment in innovation by beneficiary MSMEs; and (iii) an increase in the survival rate of beneficiary dynamic business ventures. In terms of outputs, the program will finance different types of enterprise innovation and technological modernization projects (see Annex II).
- 1.25 **Economic evaluation.** The program is expected to generate a highly positive social return through benefits stemming from improvements in the innovative and productive performance of the beneficiary companies. In a conservative scenario, and using a 12% discount rate, the program's estimated net present value (NPV) is US\$340 million and its internal rate of return is 24%. The cost/benefit analysis conducted for the first three components met with favorable results in all cases. The sensitivity analysis shows that the distribution of NPV is positive even under the most conservative scenarios. Parameters with the most impact on variations of NPV are: (i) growth in the ratio of investment in innovation to sales of beneficiary companies in strategic sectors (Component 1); and (ii) the GDP growth rate (see [Program Economic Analysis](#)).

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 The proposed CCLIP is for up to US\$1.5 billion from the Bank's Ordinary Capital. It will be available for use over a 12-year period, during which up to three individual operations are expected.
- 2.2 The total estimated cost of the first program under the CCLIP will be US\$703.6 million, US\$600 million of which to be financed by the Bank from the Ordinary Capital, and US\$103.6 million as local counterpart funding contributed by FINEP.⁵³ The Bank loan will be used in Components 1 and 2 to fund companies either directly through FINEP or else mediated through its accredited financial agents (second-tier transactions). FINEP counterpart resources may be used for nonreimbursable financing under Components 1, 2, and 3, and for contracting and procurement in Component 4.
- 2.3 The budget for each component and by source of financing is presented in Table 1 and in the [Itemized Budget](#). The program's disbursement period will be five years, according to the schedule indicated in Table 2.

⁵³ [Approved Program Request Letter](#).

Table 1. Program cost (US\$ million)

	IDB	Local	Total	%
C1: Innovation in priority sectors	491.4	31.6	523	74
C2: MSME technological innovation	108.6	0.1	108.7	16
C3: Dynamic business ventures	0	57.6	57.6	8
C4: Institutional strengthening and open innovation	0	14.3	14.3	2
TOTAL	600	103.6	703.6	100

Table 2. Disbursement schedule (US\$ million)

	1	2	3	4	5	Total
	104.4	162.1	159.1	87.2	87.2	600
Percentage per year – Bank resources	17.5%	27%	26.5%	14.5%	14.5%	100%

- 2.4 **CCLIP eligibility.** In compliance with the Proposed Modification to the Conditional Credit Line for Investment Projects: Strengthening the Multisector Approach (document GN-2246-9), it should be noted that FINEP, the executing agency of the proposed operation, has: (i) satisfactorily implemented similar projects in the innovation sector over the last five years (paragraph 1.14); (ii) a solid track record executing projects financed by other development institutions; and (iii) the required level of institutional soundness to satisfactorily execute the first operation proposed under the CCLIP. With respect to its previously executed projects, FINEP has: (i) demonstrated satisfactory execution performance, achieving the expected milestones and outcomes; (ii) fulfilled the terms of the financing agreements; and (iii) submitted financial and operating reports, including audited financial statements, accounts, budget execution, and operations management reports, which were produced and presented on time and with an acceptable level of quality from the standpoint of financial management and operational control of the program. In addition, the CCLIP’s objectives and areas of action are aligned with the country strategy and prioritized in the 2017 Operational Program Report.
- 2.5 The CCLIP is an effective tool for this intervention because it: (i) facilitates a long-term relationship between the Bank and the country, and between the former and the innovation sector; (ii) provides a framework of programmatic financing with the aim of strengthening joint work, through which FINEP will be able to respond effectively to the different financing needs of business innovation in strategic areas. It has recently demonstrated this capacity through the implementation, with BNDES funding, of the Investment Sustainability Program, which financed over 170 innovation projects; (iii) creates an intervention framework for the Bank and FINEP, an executing agency with extensive experience and proven institutional capacity; and (iv) promotes the implementation of an efficient and flexible mechanism to prepare and approve the financing operations prioritized by the federal government.
- 2.6 **Eligibility of the first operation under the CCLIP.** The first individual loan complies with the eligibility requirements set out in the Bank’s Policy on the CCLIP instrument,⁵⁴ since: (i) it will finance activities in the innovation sector, which is

⁵⁴ Document GN-2246-9.

targeted by the CCLIP; (ii) it is included in the 2017 Operational Program with Brazil; and (iii) the borrower and executor of the operation, FINEP, is a stable and leading institution of Brazil's innovation sector; it was created by the federal government in 1967, and has a long track record of executing Bank-financed operations, all of which have been implemented satisfactorily.⁵⁵ The Bank analyzed FINEP's institutional capacity using the Institutional Capacity Assessment System (ICAS) methodology, which found a high level of technical capacity, adequate information systems, as well as internal and external control, indicating a high level of execution capacity and low fiduciary risk for this operation.⁵⁶

B. Environmental and social risks

- 2.7 In accordance with Directive B.13 of the Bank's Environment and Safeguards Compliance Policy (Operational Policy OP-703), the first operation of the CCLIP does not require classification. Given the size and potential socioenvironmental impacts of the operation, it is classified in the Financial Intermediation FI-1 category.
- 2.8 The program will neither fund activities on the IDB Exclusions List, as detailed in Annex 1 of the [program Operating Regulations](#), nor will it finance category "A" projects.
- 2.9 FINEP is moving forward with the development and implementation of a socioenvironmental risk policy in line with the management of second-tier loans of low-to-medium environmental risk. FINEP will implement the environmental and social procedures, included as an annex to the [program Operating Regulations](#), the objectives of which are to: (i) define activities eligible to receive Bank financing; (ii) design processes to identify potential risks and impacts from projects; and (iii) specify the due diligence procedures required in each component.
- 2.10 In accordance with Brazilian FINEP currently requires environmental permits to be presented in its loans, in accordance with Brazilian law. In addition, for projects of high socioenvironmental sensitivity financed under component 1 of the program, FINEP will hire a consultant to perform environmental and social studies and hold the public consultations required in the Bank's policies for category "B" operations, which will enable it to comply with the standards of the Bank's policies. The consultant will perform the classification and due diligence of the operations in close coordination with the Bank. For projects financed under Component 1, in sectors of low socioenvironmental sensitivity, and under Components 2 and 3, which will have low socioenvironmental impacts, FINEP will use the environmental and social management procedures, included as an annex to the [program Operating Regulations](#).
- 2.11 A "medium" socioenvironmental risk is that FINEP may fail to classify and monitor the mitigation of potential negative impacts identified in the subprojects. This will be mitigated by instituting formal risk management analysis processes in conjunction

⁵⁵ The Bank's support to FINEP began before the latter was created in its current form. In 1965, the Bank financed the creation of the Fundo de Financiamento de Estudos de Projetos e Programas [Fund for the Financing of Project and Program Studies] (FINEP), which was intended to provide funding for economic development projects and programs. Operated at that time by BNDES, in 1967 this fund became the public enterprise Financiadora de Estudos e Projetos ("FINEP"). In 1972, the first loan agreement signed between the new FINEP and the Bank represented the latter's first loan in the STI area. For details see: <http://www.finep.gov.br/a-finep-externo/historico>

⁵⁶ See details in the [Institutional Analysis – ICAS](#).

with specialists from the Environmental Safeguards Unit; and FINEP technicians will be provided with training in Bank environmental and social policies.

C. Fiduciary risks

2.12 As part of program design, an institutional capacity analysis was conducted on FINEP using the Bank's methodology (ICAS) (see [Institutional analysis](#)), which resulted in a weighted consolidated evaluation of 86.83%. The results show that FINEP has an organizational structure, procedures, and an operational framework that are appropriate and robust. It also has extensive experience in STI financing. Based on this knowledge, the institution is deemed to have a satisfactory level of development and sufficient capacity to fulfill its financial management activities and administration of the resources of the proposed operation, resulting in a low risk for program execution.

D. Other risks

2.13 A "medium" development risk has been identified since, if the economy as a whole does not perform well, the instruments provided in the offer of support are unlikely to attract the same interest among companies as they would if the economy was generating solid and more secure results for the private sector. This risk will be mitigated by designing a plan to promote the instruments among potential users of the program.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

3.1 **Borrower and executing agency.** FINEP will be the borrower and executing agency. The guarantee provided by the Federative Republic of Brazil will be limited to FINEP's financial obligations under the loan (including repayment of principal, interest payments, and other lending charges); but it will not cover performance obligations or local counterpart contributions.⁵⁷ It is therefore proposed that the Board of Executive Directors approve a partial waiver of the Bank's Policy on Loan Guarantees (document GP-104-2) required from the borrower.

3.2 FINEP is Brazil's leading innovation promotion agency. It faces two major challenges in fulfilling its mission: (i) the need to obtain financial resources for long-term funding; and (ii) the need for institutional strengthening to make its interventions more effective, particularly in terms of capabilities for impact assessment, open innovation, and environmental impact assessments of its projects.

3.3 Since its creation in 1967, FINEP's mission has been to implement federal government activities to foster state-of-the-art technologies that enhance Brazil's global competitiveness and serve as a catalyst for social and economic progress. FINEP is the only institution that operates independently throughout the chain of technological innovation; basic research; applied research; and product, process and service development. With a staff of about 740, FINEP finances R&D initiatives at universities, research centers, and private firms with different levels of

⁵⁷ FINEP is a financially autonomous entity with ample execution capacity relative to its obligations to the Bank. This waiver will not affect the operation's risk profile because it relates only to the project's implementation obligations.

- technological risk throughout the country, which is why it is considered the “Brazilian innovation agency.”⁵⁸
- 3.4 **Program execution and management mechanism.** FINEP will execute the program through a program management unit (PMU), which will serve as a liaison with the Bank. The structure and duties of the PMU will include the coordination of program execution activities such as planning, administrative support, financial management, and social and environmental management monitoring.
- 3.5 **The establishment of the PMU and its respective functions, in accordance with the program Operating Regulations, is considered key for the program’s efficient implementation, and will therefore be a special contractual condition precedent to the first disbursement.** The details of the operational functioning of the program’s components and execution arrangements, the model legal instruments to be used in granting subloans, and the program’s environmental and social management procedures will be included in the [program Operating Regulations](#). **As a special contractual condition precedent to the first disbursement of the loan, FINEP will approve the program Operating Regulations and its annexes, including the environmental and social management procedures, in accordance with the Bank’s safeguard policies, pursuant to the draft previously agreed upon with the Bank.** This condition is essential for providing the PMU with guidelines detailing the main operational aspects and defining coordination procedures with FINEP’s other operating areas.
- 3.6 **Fiduciary agreements and requirements.** Annex III sets out guidelines on financial management and procurement execution applicable to the program. The program will operate with advances of funds from the Bank, which must meet the project’s actual liquidity needs. To provide justification to the Bank for expenditures involving the funds allocated to Components 1, 2, and 3, the purpose of the expenditure will be the funds disbursed by FINEP to sub-borrowers or financial agents accredited with FINEP (for loans made directly or indirectly with Bank funding) and to the beneficiaries (in the case of nonreimbursable counterpart financing).
- 3.7 **Retroactive financing and recognition of expenses.** The Bank may retroactively finance up to US\$120 million (20% of the loan amount) and recognize up to US\$22 million as a charge against the counterpart funding (20% of the local contribution), for expenditures incurred to finance innovation projects and program management. To be eligible, the expenditures in question must have satisfied requirements substantially analogous to those specified in the loan contract, and the procedures followed must be consistent with the provisions of the Bank’s policies on the recognition of expenditures and retroactive financing (Operational Policy OP-504). The expenses in question must have been incurred on or after 13 March 2017 (project profile approval date), but in no case may they include expenditures incurred more than 18 months prior to the loan approval date.
- B. Summary of results monitoring arrangements**
- 3.8 **Monitoring.** The program will be monitored by the PMU, which will file semiannual reports with the Bank on the progress made on output indicators and the intermediate results defined in the Results Matrix and in the [Monitoring and](#)

⁵⁸ Between 2011 and 2015, FINEP disbursed an average of US\$1.5 billion per year in innovation projects (56% of which is reimbursable funding and 44% nonreimbursable).

- [Evaluation Plan](#). The second-semester reports for each year will include an [Annual Work Plan](#) and, if necessary, a revision of the goals for the remainder of the program.
- 3.9 **Evaluation.** Program evaluation will be coordinated by FINEP, following the Monitoring and Evaluation Plan guidelines. A final evaluation, to be made when 90% of the program's resources have been disbursed, will have the following main objectives: (i) verify the degree to which the indicators specified for the program's general objectives have been attained; (ii) evaluate the implementation of the different components and instruments relative to the targets specified in the Results Matrix; and (iii) identify lessons learned for application in future projects. The final evaluation will analyze the impact using non-experimental techniques based on the difference-in-difference method combined with statistical matching, as detailed in the [Monitoring and Evaluation Plan](#).

Development Effectiveness Matrix		
Summary		
I. Corporate and Country Priorities		
1. IDB Development Objectives	Yes	
Development Challenges & Cross-cutting Themes	-Productivity and Innovation -Climate Change and Environmental Sustainability	
Country Development Results Indicators	-Micro / small / medium enterprises financed (#)*	
2. Country Development Objectives	Yes	
Country Strategy Results Matrix	GN-2850	Improve the business climate (i); Support for the development of SMEs (ii)
Country Program Results Matrix	GN-2884	The intervention is included in the 2017 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		
3. Evidence-based Assessment & Solution	Evaluable	
3.1 Program Diagnosis	9.0	
3.2 Proposed Interventions or Solutions	2.0	
3.3 Results Matrix Quality	4.0	
3.3 Results Matrix Quality	3.0	
4. Ex ante Economic Analysis	7.0	
4.1 The program has an ERR/NPV, a Cost-Effectiveness Analysis or a General Economic Analysis	4.0	
4.2 Identified and Quantified Benefits	1.5	
4.3 Identified and Quantified Costs	0.0	
4.4 Reasonable Assumptions	0.0	
4.5 Sensitivity Analysis	1.5	
5. Monitoring and Evaluation	10.0	
5.1 Monitoring Mechanisms	2.5	
5.2 Evaluation Plan	7.5	
III. Risks & Mitigation Monitoring Matrix		
Overall risks rate = magnitude of risks*likelihood	Low	
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	Yes	
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. Procurement: Information System.
Non-Fiduciary		
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Gender Equality		
Labor		
Environment		
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	Yes	The BR-T1179 project aims at improving the technological capacity of the executing agency (FINEP) for the reception, registration, and analysis of innovation projects.
The ex-post impact evaluation of the project will produce evidence to close knowledge gaps in the sector that were identified in the project document and/or in the evaluation plan	Yes	The Project will destinate resources to generate six impact evaluations, of which three will use the method of propensity score matching to measure the effectiveness of the first three components of the Project. Additionally, ex-post economic analysis will be conducted for each and every one of the priority sector projects supported by the program.

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

The "Program Innovate to Grow" is the first operation of a CCLIP, and aims to promote productivity improvements through incentives for investing in innovation. The diagnosis identifies four structural causes of the low productivity of Brazilian firms: (1) insufficient private investment in innovation amongst most of the firms; (2) low complexity of the productive structure; (3) disparities in the innovation levels of different types of firms; and (4) insufficient entrepreneurial dynamism. The operation will address these problems through: financial supports for firms in priority sectors (component 1); financial supports for micro, small, and medium enterprises (SME) with innovation potential (component 2); mainly financial supports for dynamic enterprises (component 3), and strengthening of the executing agency (component 4). The expected results include, amongst other, an increase in the percentage of firms that create new products (component 1 and 2), and the percentage of enterprises that survive the fifth year (component 3).

The cost-benefit analysis relies on a partial equilibrium model. The main benefit is the increase in firm sales resulting from higher levels of investment in research and development, and a higher survival rate of firms. The main costs are the financial resources financed by the program. In general, the exercise is adequate, estimated benefits are derived from the indicators in the results matrix. Assumptions are justified with empirical evidence, and the sensitivity analysis considers different scenarios. One limitation is that the costs faced by firms (other than those financed by the program) are not considered in the analysis, such as co-financing. As a result, the rate of return of 24% may over-estimate the true social returns of the program.

The monitoring and evaluation plan is solid. The monitoring mechanisms allow to adequately track both outputs and outcomes. The evaluation plan relies on the methodology of propensity score matching to separate the change in the indicators of interest that is attributable to the project from the changes that may be driven by other causes. In addition, sufficient evidence regarding the feasibility of implementing the evaluation plan is presented (the plan identifies the dataset to be used, the required sample size, etc.).

RESULTS MATRIX

Overall and specific objectives of the program:	The CCLIP's objective is to boost the productivity of Brazilian enterprises by encouraging greater private sector investment in innovation and invigorating the National Innovation System. The overall objective of the first individual operation under the CCLIP is to foster productivity gains by promoting investment in innovation. The specific objectives are to: (i) increase investment in innovation of companies in priority sectors; (ii) increase technology adoption among micro, small and medium-sized enterprises (MSMEs) with innovative potential; (iii) facilitate the growth of dynamic business ventures; and (iv) strengthen FINEP institutional capacity to design, monitor, and evaluate strategic projects.
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EXPECTED IMPACT

	Indicators	Unit of measurement	Baseline	Baseline year	2024 target	Means of verification/comments
1	Labor productivity (sales per worker) – average of beneficiary companies	US\$	116,500	2014-2016	128,000	The baseline is the median of all FINEP beneficiary companies at the time of application. The 2023 target is based on the growth differential between FINEP beneficiaries in the three program components and a control group (nonbeneficiary applicant companies).
2	Recovered capital to invested capital (investment in dynamic business venture beneficiaries of FINEP's Startup program)	%	0.5	2014	1.1	FINEP Startup Information System. Baseline is the average indicator for two seed capital funds of the INOVAR program (now closed).

EXPECTED OUTCOMES

	Indicators	Unit of measurement	Baseline	Baseline year	2022 target	Means of verification/comments
Component 1: Innovation in priority sectors						
1.1	Average ratio of investment in research, development, and innovation to sales of beneficiary companies in strategic sectors	%	2.3	2014-2016	2.9	The baseline is the median of all FINEP beneficiary companies in strategic sectors at the time of application. The 2023 target is based on the growth differential between FINEP beneficiaries in strategic sectors and a control group (nonbeneficiary applicant companies).
1.2	Percentage of beneficiary companies in strategic sectors that created a new product or process	%	54	Average 2012-2014	66	The baseline is the average of large firms (100 or more employees) that launched product or process innovations between 2012 and 2014, as reported in the Brazilian Survey of Technological Innovation (PINTEC).

Component 2: MSME technological innovation						
2.1	Average ratio of investment in research, development, and innovation to sales of MSME beneficiaries	%	2.6	2014	3.1	The beneficiary companies are those supported by Component 2. Information is obtained from the applications systems of each financial intermediary. The control group will consist of rejected applicants and PINTEC survey microdata. Research, development, and innovation baseline to 2014 sales of companies with 10 to 100 employees, as reported in the PINTEC.
2.2	Percentage of MSME beneficiaries that created a new product or process	%	34	Average 2012-2014	46	The baseline is the average of SMEs (10 to 99 workers) that launched product or process innovations between 2012 and 2014, as reported in the PINTEC.
Component 3: Dynamic business ventures						
3.1	Survival of beneficiary companies of the FINEP Startup program	% of companies that survive to the fifth year	50	2014-2016	52	FINEP Startup Monitoring System. Refers to program beneficiary companies that survive at least five years, relative to new startup companies in a control group. The control group is obtained from the database of the Brazilian Microenterprise and Small Business Support Service (SEBRAE).

OUTPUTS

	Outputs	Cost (US\$ million)	Unit of measurement	Baseline year (*)	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Final target	Comments and means of verification
Component 1: Innovation in priority sectors											
1.1	Innovation projects funded – chemical industry	155.87	Projects financed (**)	17	8	8	8	3	3	30	Program management unit (PMU)
1.2	Innovation projects funded – mining and mineral processing	107.49	Idem	8	0	3	3	2	2	10	PMU
1.3	Innovation projects funded – advanced biofuels	116.13	Idem	3	1	1	5	6	7	20	PMU
1.4	Innovation projects funded – agribusiness, food and beverages	116.80	Idem	17	3	4	2	1	1	11	PMU
1.5	Innovation projects funded – information and communication technologies	39.68	Idem	22	2	2	1	0	0	5	PMU
1.6	Innovation projects – health	13.58	Idem	15	1	1	1	0	0	3	PMU
1.7	Innovation projects financed – machine tool industries	16.26	Idem	45	1	1	1	0	0	3	PMU

	Outputs	Cost (US\$ million)	Unit of measurement	Baseline year (*)	Year 2017	Year 2018	Year 2019	Year 2020	Year 2021	Final target	Comments and means of verification
Component 2: MSME technological modernization											
2.1	MSME innovation projects financed	64.65	Projects financed	287	25	25	25	13	12	100	PMU
Component 3. Dynamic business ventures											
3.1	Projects to finance dynamic business ventures in the technology field	67.35	Projects financed	0	25	50	50	37	38	200	PMU
Component 4. Institutional strengthening and open innovation											
4.1	Roadmapping and prospecting studies in strategic chains	0.32	Studies financed	0	8	0	0	0	0	8	PMU
4.2	Impact assessment	0.98	Impact assessment studies conducted	0	0	0	2	2	2	6	Includes an impact assessment of three program components, plus an evaluation of the impact of credit instruments, subsidies, and S&T institute infrastructure and research.
4.3	Social innovation pilot	0.4	Pilot implemented	0	0	1	0	0	0	1	PMU
4.4	Knowledge dissemination plan	1.01	Knowledge dissemination plan implemented	0	0	0	0	0	1	1	Annual dissemination campaign report
4.5	International benchmarking activities	0.03	Knowledge dissemination missions conducted	0	0	3	0	0	0	3	Mission terms of reference and report
4.6	Systems: (i) environmental and social management; and (ii) software and management tools	13	System implemented	0	0	0	0	0	1	1	Manuals approved by FINEP's board of directors

* The baseline was calculated on the basis of FINEP experience between 2013 and 2016.

** This unit of measurement captures the number of projects/individuals/plans that received a first disbursement from the program during the year in question.

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Brazil
Program name: Innovation for Growth Program
Program number: BR-L1490
Prepared by: Santiago Schneider and Edwin Tachlian (VPC/FMP)

I. EXECUTIVE SUMMARY

- 1.1 The Research and Projects Financing Agency (FINEP) is a federal public enterprise attached to the Ministry of Science, Technology, Innovation, and Communications (MCTIC). It was created in 1967 to finance research and development (R&D) initiatives in universities, research centers, and private firms in Brazil. FINEP's mission is to promote state-of-the-art technologies that boost the country's competitiveness worldwide and to serve as a catalyst for social and economic progress through reimbursable/nonreimbursable financial support and investment.

II. FIDUCIARY CONTEXT OF THE COUNTRY AND EXECUTING AGENCY

- 2.1 The President of FINEP is appointed by the Office of the President of the Republic and reports directly to the FINEP's board of directors, its highest decision-making body, comprising representatives of the MCTIC, the Ministry of Planning, and the Ministry of Finance. It also has an advisory board—a strategic advisory body comprised of representatives of the Ministry of Planning, the MCTIC, the Ministry of Industry, the National Bank for Economic and Social Development (BNDES), the National Council for Scientific and Technological Development, and an audit board staffed by personnel of the MCTIC and the National Treasury Secretariat.
- 2.2 Since FINEP is outside the perimeter of the Fiscal Budget and Social Security system, its investments are not provided for under the General Budget of the Union, but rather included in the investment budget of State-owned enterprises.
- 2.3 In terms of accountability, FINEP is subject to a number of federal supervisory and oversight bodies, including the Ministry of Transparency, Supervision, and Control (formerly the Office of the Comptroller General of the Union (CGU)), the Federal Audit Office (TCU), and the offices of the state and federal attorneys general.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 FINEP has extensive operational experience with financial institutions. Its organizational structure includes a department specializing in all requirements associated with such institutions, as well as a fundraising department attached to its finance and funding division. Since its inception, FINEP's administration of Bank financing and performance as a borrower have been satisfactory.
- 3.2 Its most recent operation with the Bank was loan 880/OF-BR in the amount of US\$316 million (including the local counterpart contribution), which was signed in 1996 to implement the second stage of a similar program. Activities in that phase included: (a) support for key research centers to develop scientific skills; (b) support for technological development in the private sector; and (c) FINEP strengthening through a capitalization process financed with a global credit line.

- 3.3 In preparing this project and drafting its fiduciary agreements, the Bank reviewed FINEP institutional capacity using the ICAS methodology. The assessment found that the institution maintains a high level of technical capacity, adequate information, and internal and external controls, thus confirming the operation's high execution capacity and low fiduciary risk.

IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACT

- 4.1 **Exchange rate.** For accounting purposes, the exchange rate applicable to IDB resources will be the internalization rate; with respect to the local counterpart, the rate will be the Central Bank of Brazil's buying rate prevailing on the last business day of the month preceding the month justifications are presented to the Bank.
- 4.2 **Submission of the program's annual audited financial statements.** The program's financial statements, audited pursuant to the terms of reference agreed upon between the Bank and the Ministry of Transparency, Oversight and Control, or by a Bank-eligible external audit firm, will be submitted within 120 days after the close of each fiscal year.
- 4.3 **Retroactive financing and recognition of expenditures.** The Bank may retroactively finance up to US\$120 million (20% of the loan amount) and recognize up to US\$22 million (20% of the local counterpart contribution) against the local counterpart contribution, as eligible expenditures incurred to finance innovation projects and program management (the latter in the event of retroactive financing), provided that requirements substantially analogous to those specified in the loan contract have been fulfilled and the procedures followed are consistent with the Bank's policy governing retroactive expenditures (Operating Policy OP-504). Such expenditures will have been incurred on or after March 13, 2017 (project profile approval date), but will in no case include expenditures incurred more than 18 months prior to the loan approval date.

V. AGREEMENTS AND REQUIREMENTS FOR PROCUREMENT EXECUTION

- 5.1 **Procurement execution.** Procurement processes will be conducted pursuant to the Policies for the Procurement of Goods and Works Financed by the IDB (document GN-2349-9) and the Policies for the Selection and Contracting of Consultants Financed by the IDB (document GN-2350-9), under the following terms:
- a. **When the borrowers or beneficiaries of subloans or grants are private-sector small and medium-sized enterprises (SMEs):** With regard to the components of the loan to be allocated to FINEP as a development finance intermediary, procurement processes will be conducted in accordance with current private-sector or commercial practices that are acceptable to the Bank, pursuant to the provisions of paragraph 3.12 of the Policies for the Procurement of Goods and Works Financed by the IDB (document GN-2349-9). All subloans made with program funding will include the sub-borrowers' commitment to execute eligible operations in observance of the provisions on prohibited practices.
 - b. **For contracting and procurement processes to be implemented directly by FINEP:** Contracts for works, goods, and nonconsulting services under the program and subject to international competitive bidding (ICB) will be executed using the standard bidding documents issued by the Bank. Procurement

processes subject to national competitive bidding (NCB) will be executed using country bidding documents agreed upon with, or satisfactory to, the Bank. The technical specifications of procurement processes will be reviewed during the preparation of selection processes by the program's sector specialist.

- c. **Use of the country procurement system:** The online reverse auction procurement subsystem of the federal government's *Comprasnet* system will be used to purchase off-the-shelf goods and services in amounts up to the shopping threshold (generally US\$5 million). Any system or subsystem approved subsequently will apply to the operation. The operation's procurement plan and updates will stipulate the contracts to be executed through the approved country systems.
- d. **Selection and hiring of consultants:** Consulting service contracts under the program will be implemented using the standard request for proposals issued by, or agreed upon with, the Bank.

Table 1. Thresholds for ICB and international shortlist (US\$)

Method	ICB – works	ICB – Goods and nonconsulting services	International shortlist for consulting services
For private sub-borrowers and beneficiaries	Paragraph 3.12 of the procurement policies		
Activities executed directly by FINEP	US\$25 million	US\$5 million	US\$1 million

- 5.2 **Recurrent expenditures.** None anticipated under this operation.
- 5.3 **Domestic preference.** Not applicable, based on the implementation arrangements (document GN-2349-9, paragraph 3.12).
- 5.4 **Procurement plan.** For components that will finance financial intermediation (loans) and nonreimbursable financing, the sub-borrowers and beneficiaries will apply private sector procurement practices, pursuant to paragraph 3.12 of the aforementioned policies. Accordingly, the program procurement plan will cover the contracting and procurement processes that FINEP will execute under Component 4 (which will finance specific activities).
- 5.5 **Procurement supervision.** For subloans to private enterprises, the supervision mechanism will abide by the provisions of paragraph 3.12 of the aforementioned policies. For activities executed directly by FINEP, the procurement supervision method will be as defined by the Bank (ex post, except in cases where ex ante supervision is justified). When procurement processes are executed using the country system, they will also be supervised under that system.
- 5.6 Ex post reviews will be performed every 12 months according to the program supervision plan. Ex post review reports will include at least one physical inspection visit, selected from procurement processes subject to ex post review.

Table 2. Threshold for ex post review

Works	Goods	Consulting services
US\$25 million	US\$5 million	US\$1 million

- 5.7 **Records and files.** The files will be kept at the executing agency's offices, duly identified and in chronological order by operation and private sub-borrower, and under appropriate security and surveillance conditions.

VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

A. Programming and budget

- 6.1 The General Budget of the Union is the instrument the federal government uses in allocating resources to meet the needs or demands of society, including those of federal public enterprises. Within that budget, each federal agency has its own budget. The budget for State-owned enterprises combines internally generated resources and federal funding, and is consolidated in the Global Spending Program. Information on this program is obtained through the State Enterprise Information System (SIEST).
- 6.2 Planning, programming, and management activities are coordinated among FINEP's Planning Area (APLA), Finance and Oversight Division (DRFC), and Corporate Management Division (DGES). They are responsible for corporate planning activities, analyzing budget execution, and managing all economic, financial, and internal control activities.
- 6.3 FINEP's programming and planning system is governed by its by-laws, supplemented by manuals, standards, and resolutions issued by its president and major departments. The planning and scheduling of program activities will be carried out within FINEP's current structure, and funding for the program will be included in its annual budget. FINEP has already established a budget appropriation for this operation in 2017.

B. Accounting and information system

- 6.4 FINEP has several Oracle-based financial information systems that support accounting and financial recordkeeping. These systems—Oracle's PeopleSoft Financials (FIN) and Supply Chain Management (SCM) (General Ledger, Accounts Payable, and Hyperion modules)—make it possible to generate management, accounting, and financial reports. They also facilitate accountability and manage all stages of bidding processes (from purchases to payments).
- 6.5 The enterprise resource planning (ERP) credit management system, which will be used for Bank operations, currently does not support the recording and control of operations in foreign currency. Consequently, all transactions involving Bank financing and local counterpart funding must either be recorded in a parallel system or the current system (which issues dollar-denominated financial reports and would therefore need to be adapted). This is a condition precedent to the first disbursement.
- 6.6 In 2010, FINEP embarked on a reorganization process to meet operating requirements as a financial institution licensed and regulated by the Central Bank. Accordingly, it has made significant progress in modernizing information management systems (Projeto Modernize), including an integrated loan project

evaluation system (FINEP 30 dias Inovação), and FINEPs transition from the Integrated Financial Management System (SIAFI) to the Accounting Chart for Institutions of the National Financial System (COSIF).

- 6.7 Pursuant to Bank policy, FINEP will submit audited financial statements for the program detailing the use of the loan proceeds. These will be submitted annually, within 120 days after the close of each fiscal year during the disbursement period.

C. Disbursements and cash flow

- 6.8 The proceeds of the loan will be disbursed in U.S. dollars in the advance of funds modality covering a period of up to 180 days. This advance will be documented with detailed programming information of transfers to eligible contracts.
- 6.9 Disbursement requests will be submitted to the Bank pursuant to the requirements of the loan contract, the information specified in the program Operating Regulations, and the content of the Bank's financial management guidelines.
- 6.10 Disbursements in dollars will be internalized and deposited into a bank account designated by FINEP for managing the program's Bank-funded resources. This will be an exclusive account.
- 6.11 Disbursements by the Bank will be audited and verified ex post.

D. Internal control and internal audit

- 6.12 FINEP's Internal Audit Unit (AUDI) has a team of auditors responsible for defining and monitoring the internal audit actions, with the aim of systematically monitoring the evaluation and management analysis actions of FINEP units. The activities to be conducted annually by the AUDI are specified in the Annual Internal Audit Activities Plan (PAINT).
- 6.13 FINEP's Internal Control Area (OCI) evaluates the effectiveness of processes, internal controls, risk management, and governance.
- 6.14 The Audit Department (DAUD) is responsible for the internal implementation of the orders of supervisory bodies and for compiling information to formally respond to them. DAUD exercises control over the documents received and follows up to ensure that any such orders are addressed within the established time frames.
- 6.15 DAUD also supports the CGU and TCU audit teams in their fieldwork and with back-office audit tasks. In 2016, FINEP was audited by the CGU, the TCU, and the monitoring team of the Telecommunications Technological Development Fund (FUNTELL).

E. External control and reporting

- 6.16 FINEP is periodically audited by the two national oversight bodies, the TCU and the Ministry of Transparency, Supervision and Control.
- 6.17 FINEP's financial statements are audited by a private external audit firm, which changes every three years. Its current external auditor is SRV Auditores.
- 6.18 FINEP will provide the Bank with annual audited financial statements for the program no later than 120 days after the close of the fiscal year (31 December). The corresponding report will be approved by the Ministry of Transparency, Inspection, and Control, any entity succeeding it with the same legal powers and competencies, or by an audit firm acceptable to the Bank, and will be produced in accordance with the terms of reference previously agreed upon with the Bank.

F. Supervision plan

6.19 The supervision plan may be modified during project execution, according to observed risk levels or to satisfy additional controls, as determined by the Bank.

Table 3. Supervision plan

Supervision activity	Nature-scope	Frequency	Responsible entity	
			Bank	Executing agency
Financial	Ex post review	Annual	Fiduciary team	FINEP
	Annual audit	Annual	Fiduciary team	FINEP
	Review of disbursement requests	Periodic	Sector/fiduciary team	
	Supervision visit	Annual	Sector/fiduciary team	

FIDUCIARY AGREEMENTS AND REQUIREMENTS

Country: Brazil
Program name: Innovation for Growth Program
Program number: BR-L1490
Prepared by: Santiago Schneider and Edwin Tachlian (VPC/FMP)

I. EXECUTIVE SUMMARY

- 1.1 The Research and Projects Financing Agency (FINEP) is a federal public enterprise attached to the Ministry of Science, Technology, Innovation, and Communications (MCTIC). It was created in 1967 to finance research and development (R&D) initiatives in universities, research centers, and private firms in Brazil. FINEP's mission is to promote state-of-the-art technologies that boost the country's competitiveness worldwide and to serve as a catalyst for social and economic progress through reimbursable/nonreimbursable financial support and investment.

II. FIDUCIARY CONTEXT OF THE COUNTRY AND EXECUTING AGENCY

- 2.1 The President of FINEP is appointed by the Office of the President of the Republic and reports directly to the FINEP's board of directors, its highest decision-making body, comprising representatives of the MCTIC, the Ministry of Planning, and the Ministry of Finance. It also has an advisory board—a strategic advisory body comprised of representatives of the Ministry of Planning, the MCTIC, the Ministry of Industry, the National Bank for Economic and Social Development (BNDES), the National Council for Scientific and Technological Development, and an audit board staffed by personnel of the MCTIC and the National Treasury Secretariat.
- 2.2 Since FINEP is outside the perimeter of the Fiscal Budget and Social Security system, its investments are not provided for under the General Budget of the Union, but rather included in the investment budget of State-owned enterprises.
- 2.3 In terms of accountability, FINEP is subject to a number of federal supervisory and oversight bodies, including the Ministry of Transparency, Supervision, and Control (formerly the Office of the Comptroller General of the Union (CGU)), the Federal Audit Office (TCU), and the offices of the state and federal attorneys general.

III. FIDUCIARY RISK EVALUATION AND MITIGATION MEASURES

- 3.1 FINEP has extensive operational experience with financial institutions. Its organizational structure includes a department specializing in all requirements associated with such institutions, as well as a fundraising department attached to its finance and funding division. Since its inception, FINEP's administration of Bank financing and performance as a borrower have been satisfactory.
- 3.2 Its most recent operation with the Bank was loan 880/OF-BR in the amount of US\$316 million (including the local counterpart contribution), which was signed in 1996 to implement the second stage of a similar program. Activities in that phase included: (a) support for key research centers to develop scientific skills; (b) support for technological development in the private sector; and (c) FINEP strengthening through a capitalization process financed with a global credit line.

- 3.3 In preparing this project and drafting its fiduciary agreements, the Bank reviewed FINEP institutional capacity using the ICAS methodology. The assessment found that the institution maintains a high level of technical capacity, adequate information, and internal and external controls, thus confirming the operation's high execution capacity and low fiduciary risk.

IV. CONSIDERATIONS FOR THE SPECIAL CONDITIONS OF THE CONTRACT

- 4.1 **Exchange rate.** For accounting purposes, the exchange rate applicable to IDB resources will be the internalization rate; with respect to the local counterpart, the rate will be the Central Bank of Brazil's buying rate prevailing on the last business day of the month preceding the month justifications are presented to the Bank.
- 4.2 **Submission of the program's annual audited financial statements.** The program's financial statements, audited pursuant to the terms of reference agreed upon between the Bank and the Ministry of Transparency, Oversight and Control, or by a Bank-eligible external audit firm, will be submitted within 120 days after the close of each fiscal year.
- 4.3 **Retroactive financing and recognition of expenditures.** The Bank may retroactively finance up to US\$120 million (20% of the loan amount) and recognize up to US\$22 million (20% of the local counterpart contribution) against the local counterpart contribution, as eligible expenditures incurred to finance innovation projects and program management (the latter in the event of retroactive financing), provided that requirements substantially analogous to those specified in the loan contract have been fulfilled and the procedures followed are consistent with the Bank's policy governing retroactive expenditures (Operating Policy OP-504). Such expenditures will have been incurred on or after March 13, 2017 (project profile approval date), but will in no case include expenditures incurred more than 18 months prior to the loan approval date.

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processes subject to national competitive bidding (NCB) will be executed using country bidding documents agreed upon with, or satisfactory to, the Bank. The technical specifications of procurement processes will be reviewed during the preparation of selection processes by the program's sector specialist.

- c. **Use of the country procurement system:** The online reverse auction procurement subsystem of the federal government's *Comprasnet* system will be used to purchase off-the-shelf goods and services in amounts up to the shopping threshold (generally US\$5 million). Any system or subsystem approved subsequently will apply to the operation. The operation's procurement plan and updates will stipulate the contracts to be executed through the approved country systems.
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- 5.3 **Domestic preference.** Not applicable, based on the implementation arrangements (document GN-2349-9, paragraph 3.12).
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VI. FINANCIAL MANAGEMENT AGREEMENTS AND REQUIREMENTS

A. Programming and budget

- 6.1 The General Budget of the Union is the instrument the federal government uses in allocating resources to meet the needs or demands of society, including those of federal public enterprises. Within that budget, each federal agency has its own budget. The budget for State-owned enterprises combines internally generated resources and federal funding, and is consolidated in the Global Spending Program. Information on this program is obtained through the State Enterprise Information System (SIEST).
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evaluation system (FINEP 30 dias Inovação), and FINEPs transition from the Integrated Financial Management System (SIAFI) to the Accounting Chart for Institutions of the National Financial System (COSIF).

- 6.7 Pursuant to Bank policy, FINEP will submit audited financial statements for the program detailing the use of the loan proceeds. These will be submitted annually, within 120 days after the close of each fiscal year during the disbursement period.

C. Disbursements and cash flow

- 6.8 The proceeds of the loan will be disbursed in U.S. dollars in the advance of funds modality covering a period of up to 180 days. This advance will be documented with detailed programming information of transfers to eligible contracts.
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- 6.10 Disbursements in dollars will be internalized and deposited into a bank account designated by FINEP for managing the program's Bank-funded resources. This will be an exclusive account.
- 6.11 Disbursements by the Bank will be audited and verified ex post.

D. Internal control and internal audit

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- 6.13 FINEP's Internal Control Area (OCI) evaluates the effectiveness of processes, internal controls, risk management, and governance.
- 6.14 The Audit Department (DAUD) is responsible for the internal implementation of the orders of supervisory bodies and for compiling information to formally respond to them. DAUD exercises control over the documents received and follows up to ensure that any such orders are addressed within the established time frames.
- 6.15 DAUD also supports the CGU and TCU audit teams in their fieldwork and with back-office audit tasks. In 2016, FINEP was audited by the CGU, the TCU, and the monitoring team of the Telecommunications Technological Development Fund (FUNTELL).

E. External control and reporting

- 6.16 FINEP is periodically audited by the two national oversight bodies, the TCU and the Ministry of Transparency, Supervision and Control.
- 6.17 FINEP's financial statements are audited by a private external audit firm, which changes every three years. Its current external auditor is SRV Auditores.
- 6.18 FINEP will provide the Bank with annual audited financial statements for the program no later than 120 days after the close of the fiscal year (31 December). The corresponding report will be approved by the Ministry of Transparency, Inspection, and Control, any entity succeeding it with the same legal powers and competencies, or by an audit firm acceptable to the Bank, and will be produced in accordance with the terms of reference previously agreed upon with the Bank.

F. Supervision plan

6.19 The supervision plan may be modified during project execution, according to observed risk levels or to satisfy additional controls, as determined by the Bank.

Table 3. Supervision plan

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	Annual audit	Annual	Fiduciary team	FINEP
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	Supervision visit	Annual	Sector/fiduciary team	

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/17

Brazil. Conditional Credit Line for Investment Projects (CCLIP) for the
Promotion of Innovation (BR-O0004)

The Board of Executive Directors

RESOLVES:

1. To authorize the President of the Bank, or such representative as he shall designate, to enter into such agreement or agreements as may be necessary with Financiadora de Estudos e Projetos - FINEP to establish the Conditional Credit Line for Investment Projects (CCLIP) BR-O0004, for an amount of up to US\$1,500,000,000 chargeable to the resources of the Ordinary Capital of the Bank, to increase the productivity of Brazilian companies through greater private investment in innovation and a greater dynamization of the National Innovation System (NIS) of the country.

2. To determine that the resources allocated to the above-mentioned Conditional Credit Line (CCLIP) BR-O0004 shall be used to finance individual loan operations in accordance with: (a) the objectives and regulations of the Conditional Credit Line for Investment Projects approved by Resolution DE-58/03, as amended by Resolutions DE-10/07, DE-164/07, and DE-86/16; (b) the provisions set forth in documents GN-2246-9 and GN-2564-3; and (c) the terms and conditions included in the Loan Proposal for the corresponding individual operation.

(Adopted on _____ 2017)

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/17

Brazil. Loan ___/OC-BR to Financiadora de Estudos e Projetos - FINEP. Innovation for Growth Program. First Individual Operation under the Conditional Credit Line for Investment Projects (CCLIP) for the Promotion of Innovation (BR-O0004)

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 Financiadora de Estudos e Projetos - FINEP, 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 Innovation for Growth Program, which constitutes the first individual operation under the Conditional Credit Line for Investment Projects (CCLIP) for the Promotion of Innovation (BR-O0004) approved on ___ _____ 2017 by Resolution DE-___/17. Such financing will be in 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 ___ _____ 2017)