

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PERU

PROGRAM TO IMPROVE PRODUCTIVITY AND COMPETITIVENESS

(PE-L1244)

LOAN PROPOSAL

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ABBREVIATIONS

BCRP	Central Reserve Bank of Peru
BIM	Building Information Modeling
CITE	Centro de Innovación Productiva y Transferencia Tecnológica [Productive Innovation and Technology Transfer Center]
CNCF	Consejo Nacional de Competitividad y Formalización [National Competitiveness and Formalization Council]
CONCYTEC	Consejo Nacional de Ciencia, Tecnología e Innovación Tecnológica [National Council for Science, Technology, and Technological Innovation]
CPC	Consejo Privado de Competitividad [Private Competitiveness Council]
DGTP	Directorate General of the Public Treasury
EEME	Equipo Especializado de Mesas Ejecutivas [Specialized Executive Board Team]
EESI	Equipo Especializado de Seguimiento de Inversiones [Specialized Investment Monitoring Team]
GCI	Global Competitiveness Index
INACAL	Instituto Nacional de la Calidad [National Quality Institute]
INDECOPI	Instituto Nacional de Defensa de la Competencia y de la Protección de la Propiedad Intelectual [National Institute for Competition Advocacy and Intellectual Property Protection]
INNOVATE	Programa Nacional de Innovación para la Competitividad y Productividad [National Innovation Program for Competitiveness and Productivity]
MAC	Modelo de Atención Ciudadana [Public Service Model]
MEF	Ministry of Economy and Finance
MSME	Micro, small, and medium-sized enterprises
OECD	Organisation for Economic Co-operation and Development
PCM	Presidency of the Council of Ministers
PNCP	Política Nacional de Competitividad y Productividad [National Competitiveness and Productivity Policy]
PWT	Penn World Table
R&D	Research and development
RIA	Regulatory impact assessment
RQA	Regulatory quality analysis
SNC	Sistema Nacional de Calidad [National Quality System]
TFP	Total factor productivity

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Financial Terms and Conditions				
Borrower			Flexible Financing Facility^(a)	
Republic of Peru			Amortization period:	7.5 years
Executing agency			Disbursement period:	1 year
Ministry of Economy and Finance, through the Directorate General of the Public Treasury (DGTP)			Grace period:	5 years ^(b)
Source	Amount (US\$)	%	Interest rate:	LIBOR-based
IDB (Ordinary Capital):	50,000,000	100	Credit fee:	^(c)
			Inspection and supervision fee:	^(c)
			Weighted average life:	6 years
Total:	50,000,000	100	Approval currency:	U.S. dollar
Project at a Glance				
<p>Project objective/description: The general objective of the programmatic series is to support the Government of Peru in improving the economy's productivity and competitiveness. The specific objectives are to: (i) improve competitiveness by strengthening public institutions devoted to this purpose; (ii) expand private investment through policy commitments aimed at improving the environment for investment; and (iii) redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.</p> <p>This project is the first of two programmatic policy-based loans that are contractually independent and technically linked.</p>				
<p>Special contractual conditions precedent to the first and only disbursement of the loan: The first and only disbursement is contingent upon fulfilment of the policy reform conditions as set out in the Policy Matrix (Annex II), the Policy Letter, and the other terms established in the loan contract (see paragraph 3.4).</p>				
<p>Exceptions to Bank policies: None.</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 checked="" 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, interest rate, and commodity 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 relevant 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. PROJECT DESCRIPTION AND RESULTS MONITORING

A. Background, problem addressed, and rationale

- 1.1 **Macroeconomic context.** Peru has been experiencing uninterrupted economic growth for the past 20 years. Between 2000 and 2017, per capita income grew by 3.7% per year,¹ making it one of the most dynamic economies in Latin America and the Caribbean. This period can be divided into two different phases. Between 2000 and 2012, per capita income growth amounted to 4.2% per year due to the impetus of the structural reforms implemented in the 1990s and favorable external conditions (both in terms of trade and the availability of external financing).
- 1.2 Less favorable external conditions since 2013 have led to a slowdown in growth. Since 2013, per capita income has grown at an annual rate of 1.9%, which is insufficient to absorb the labor supply and reduce informality. Although growth is expected to recover somewhat in 2019 as a result of a slight improvement in the terms of trade, it is not clear that this will continue over time. Peru needs to generate new sources of dynamism to achieve sustainable growth and progress in its development.
- 1.3 **The factors behind the slowdown.** Economic growth comes from two sources. The first is the productive factor accumulation (capital and labor) arising through investment flows to increase both physical and human capital and labor force participation. The second is the efficiency with which these factors or productivity relate to one another.² At the same time, productivity depends on the technological improvements of companies, the reallocation of resources toward productive units, and external factors. Three endogenous factors thus underlie the slowdown: productivity trends, investment dynamism, and human capital. While productivity expanded 1.8% per year until 2012, trends have been negative (-0.4%) since then,³ and while investment grew by 8.6% per year from 2000 to 2012, it has remained stagnant since 2013.⁴ Human capital contributed little to growth during the period.⁵ The slowdown in productivity and investment manifests itself in low-quality trade linkages. Peru ranks 94th out of 127 countries in the Economic Complexity Ranking, behind the other countries in the Pacific Alliance.⁶
- 1.4 This operation focuses on two endogenous factors underlying the slowdown in growth: waning productivity and stagnant investment. The problem behind the waning productivity targeted by the program relates to the economy's limited innovative dynamism. The problems associated with the quality of human capital, labor force participation, and some of the problems related to the efficiency in resource allocation are addressed by the programmatic series Program Supporting Reforms to Increase Productivity in Peru (loan 4714/OC-PE), with which this program is coordinated (paragraph 1.20). Coupled with the specific productivity-related problems associated with innovation and investment dynamism (which are

¹ Central Reserve Bank of Peru (BCRP), 2019.

² Total factor productivity (TFP).

³ Ministry of Economy and Finance (MEF) (2018).

⁴ Economic Commission for Latin America and the Caribbean (2019).

⁵ A contribution of -0.17% per year in the 2000-2017 period. IDB (2019).

⁶ This indicator has declined since 2001. Center for International Development (2018).

addressed in this program) is the crosscutting problem of incipient institutional capacities to implement policies to support productivity and competitiveness.⁷

1.5 **Company decisions.**⁸ Investment and innovation depend on economic decisions made by companies; a determining factor in these decisions is the business environment.⁹ The downturn in the business environment affected investment and innovation. The country ranks 72nd out of 137 on the Global Competitiveness Index (GCI, 2017), down from 61st out of 135 in 2012. An adverse business environment affects companies in two ways: (i) it increases the cost of financing and creates barriers to entry as a result of economic concentration and excessive bureaucracy; and (ii) it reduces the return on investment projects due to a lack of complementary public goods such as infrastructure or knowledge, or hampers the related gains due to externalities or the incidence of informality.¹⁰ The effects of the downturn in the business environment on business decisions relating to investment and innovation are analyzed below.

1.6 **The business environment for investment: Lack of crosscutting public goods.** The lack of complementary public goods affects the return on investment. These public goods can be crosscutting or specific to an economic sector. Two crosscutting public goods that affect investment are the National Quality System (SNC)¹¹ and productive infrastructure. The SNC is key to the business environment because, through greater standardization, it reduces transaction costs and lowers information costs. The development of the SNC impacts the effectiveness of regulation and international linkages. Despite the establishment of the National Quality Institute (INACAL) in 2015, the SNC is still incipient. The supply of trial, testing, and conformity assessment services is limited. There are gaps in metrology infrastructure that make the supply of measurement and calibration services insufficient (e.g., in chemical and electronic metrology), excessively concentrated in Lima when there is a growing demand for these services in other regions. As a result, few accredited laboratories provide conformity assessment services.¹² In addition, corporate access to information on technical standards is low, as is State use of these standards for public procurement purposes. As a result, only 8 of 10,000 companies have ISO-9001 certifications, below Chile (53 of 10,000) and Colombia (112 of 10,000).¹³ Only 27% of companies have ever calibrated a quality control instrument. As a consequence, one quarter of companies report having their products rejected due to measurement errors, thus generating additional costs and damaging the company's image.

⁷ Competitiveness is understood as the set of institutions, policies, and factors that determine the level of productivity. World Economic Forum (2019).

⁸ See [optional link 1](#).

⁹ The set of market, institutional, and regulatory factors that shape the incentives for companies to make investments. World Bank (2004) and Dollar & Hallward-Driemeier (2005).

¹⁰ Hausmann, Rodrik, and Velasco (2008).

¹¹ Set of organizations engaging in standards design, certification, accreditation, and metrology (IDB, 2017).

¹² Nationwide, 1,200 public and private laboratories provide calibration, measurement, and testing services, of which fewer than 150 are accredited by INACAL's Accreditation Department, i.e. 1 laboratory per 10,000 companies, compared to 7 in Colombia and 12 in Chile (INACAL, 2018).

¹³ INACAL (2018).

- 1.7 **Productive infrastructure** is central to productivity because it reduces transaction costs, mitigates distance, and integrates domestic and international markets. The country ranks 86th out of 137 in the infrastructure pillar of the GCI (GCI, 2017), behind other Pacific Alliance countries such as Chile (41st out of 137) and Mexico (62nd out of 137), with significant delays in roads, ports, and airports. There is a substantial disparity in the availability of productive infrastructure across Peru's regions.¹⁴ Inadequate planning underlies the infrastructure problems, which translates into an underutilization of multimodal transport, delays,¹⁵ cost overruns,¹⁶ poor maintenance,¹⁷ and poor natural disaster risk management.¹⁸ The prioritization of investment projects based on their productive impact is low, as is the adoption of digital solutions in infrastructure design, execution, and maintenance processes.¹⁹ Lastly, there are no sufficiently developed institutional mechanisms to ensure that the planned investment translates into effective project execution.
- 1.8 **Lack of public goods in priority sectors.** The country has prioritized three productive sectors based on either their potential (forestry and aquaculture) or demonstrated (mining) comparative advantages.²⁰ In the forestry sector, Peru has 17.8 million hectares of permanent production forests,²¹ 57% of which are granted under concessions, and between 8.5 and 9.5 million hectares that can be used for plantations. Despite this potential, exports of forest products in 2018 amounted to US\$125 million, barely 0.26% of total exports. A central factor affecting timber exports is demonstrating that it does not come from illegal logging, which is complicated by the fact that the timber Peru exports comes mainly from forests, and plantation development is incipient.²² The key to reversing this situation is to strengthen the control mechanisms that demonstrate the legality of processed wood, which entails: (i) reviewing the framework of forest and wildlife penalties and infractions, prioritizing the penalization of actions that generate greater deforestation;²³ (ii) updating the official list of forest species;²⁴ (iii) strengthening the control capacities of the regional governments with forest areas;²⁵ and

¹⁴ Índice de Competitividad Regional [Regional Competitiveness Index] (2018).

¹⁵ The delay in the execution of public works stands at 62% (Private Competitiveness Council (CPC), 2019).

¹⁶ Estimated at a final cost 30% higher than the cost defined in the technical specifications (CPC, 2019).

¹⁷ Expenditure on infrastructure maintenance amounted to 0.36% of GDP in 2017, when it should be 2% (CPC, 2019).

¹⁸ Damage to infrastructure from the last three El Niño events represented between two and three percentage points of GDP (CPC, 2019).

¹⁹ Such as Building Information Modeling (BIM).

²⁰ Other factors taken into account for this selection relate to problems of public-public coordination such as a willingness to engage in dialogue, and a certain self-organization of the private sector (Ghezzi, 2019).

²¹ Not including protected natural areas, native community forests, or special or uncategorized zones, National Forest Conservation Program (PNCB) (2018).

²² Ministry of Foreign Trade and Tourism (2018).

²³ Such as a land use change, clearing, and encroachments.

²⁴ The list omits numerous species and does not include their commercial names, which are used at control posts.

²⁵ Loreto, Madre de Dios, Ucayali, and Huánuco. The regional governments are in charge of the first phase of the control.

- (iv) implementing the mandatory use of the Operations Book in forest operations.²⁶ Implementing these actions will improve control of the legality of timber, thereby reducing incentives for illegal logging, which causes forest degradation and deforestation. These actions will also contribute to mitigating climate change. Beyond strengthening control mechanisms, the country still lacks a forest sector promotion policy that integrates tax, financial, zoning, land titling, and technology transfer measures in addition to control.²⁷
- 1.9 **In the aquaculture sector**, the potential arises from the variety of Peru's hydrobiological resources, reflected in sustained export growth over 10 years, up from US\$94 million in 2008 to US\$297 million in 2017 (Ministry of Production, 2018). However, the sector's importance to the economy is marginal, with an export share of 0.60%. At the regional level, Peru only represents 3.7% of total production in Latin America and the Caribbean, far from competitors such as Chile (38.6%), Brazil (21.4%), and Ecuador (16.6%). Exports are highly concentrated in one species, shrimp (82%), which makes them vulnerable to market changes.²⁸ Given the sector's export-oriented nature, a challenge for its competitiveness is to further open up the major international markets, in particular the European Union, Asia, and Brazil, by: (i) adopting the sanitary export standards required by these markets; (ii) strengthening the National Fisheries Health Agency, modernizing its analysis laboratories and implementing process certification; (iii) implementing specific labor inspection protocols;²⁹ and (iv) strengthening technology transfer mechanisms. Additionally, an aquaculture and fishing environmental regulation should be enacted that defines the sector-specific environmental management instruments and related administrative procedures.³⁰⁻³¹ Climate change poses a challenge to the sector's sustainability, generating environmental problems, such as red tide and the El Niño phenomenon, which affect production. Developing research and innovation capacities is critical in seeking out local mitigation mechanisms.
- 1.10 **The mining sector** is clearly one of the sectors where the country has demonstrated comparative advantages, accounting for 9.9% of GDP. Mining exports represent more than 60% of total exports, totaling US\$27.7 billion in 2017.³² However, investment in the sector slowed due both to the drop in international prices following the boom of the mid-2000s and an increasingly outdated regulatory framework requiring adaptation to the growing demands relating to socioenvironmental sustainability. In this regard, the following reforms to the sector's regulatory framework have been identified as necessary in order to recover investment dynamism: (i) adapt the regulations relating to mine closure plans to streamline regulatory updates during operation and align the management of environmental

²⁶ The Operations Book is a tool that records information for traceability, providing basic information for control.

²⁷ Reforms prioritized by the corresponding Executive Board supported by operation ATN/OC-16693-PE. See [optional link 2](#).

²⁸ Other exports are Peruvian scallops, trout, tilapia, and paiche (Saldarriaga and Regalado, 2017).

²⁹ The current labor inspection framework does not differentiate between fisheries and aquaculture.

³⁰ The sector is currently governed by general environmental regulations, which do not fit the sector well.

³¹ Saldarriaga and Regalado (2017). [Optional link 3](#).

³² The main products exported are copper, gold, zinc, oil, and natural gas. Ministry of Foreign Trade and Tourism (2019).

guarantees with the execution of the plan³³ and (ii) update the prior consultation mechanism for the development of new mining operations, thus reducing uncertainty in the prospecting phase.³⁴

- 1.11 **The business environment for investment: Investment costs.** Investment costs are impacted by the financial system's degree of development and by barriers to entry arising from problems of competition and state bureaucracy. In financial development, Peru ranks 63rd out of 140 (GCI, 2018), below other countries in the Pacific Alliance.³⁵ Although the financial system has strengths in terms of solvency, the depth is less than expected on the basis of per capita income.³⁶ Credit to the private sector amounts to 41% of GDP, below the average for Latin America and the Caribbean (50%) and the countries in the Organisation for Economic Co-operation and Development (OECD) (144.8%), while the rate spread is one of the highest in the region. These results are attributable to informality, low competition, and administrative costs. Consequently, 5% of formal microenterprises have access to financing, compared to 70% of large enterprises, while the cost of financing for smaller companies is four times higher than for large companies.³⁷ The government has been addressing these problems through financing lines for micro, small, and medium-sized enterprises (MSME) extended by public-sector banks. In 2018 there were four funds,³⁸ which, although well intended, did not generate a sufficient scale of intervention, overlapped, and had high operating costs. In order to make this policy more effective, these instruments need to be consolidated into a single fund that can provide lines of financing and guarantees, and even fund investment funds. This would not only reduce the cost of managing the funds but would also allow for greater complementarity among financing instruments.
- 1.12 **Competition problems.** Free competition is central to growth since it stimulates the allocation of resources to more productive companies, leads to the departure of low-productivity companies, increases consumer surplus, and encourages innovation. Peru has one of the most open economies to international competition, but there are still problems with domestic competition. The country ranks 98th out of 137 on the 2017 GCI as regards the extent of market dominance by large enterprises; at the same time the indicator on the effectiveness of antitrust policy has declined since 2014.³⁹ In 2018 the OECD and the IDB conducted a peer review of Peru's competition policy,⁴⁰ finding that there is ample room for improvement despite significant regulatory advances over the past 20 years. In particular, it highlights the short-term need for the regulatory framework for free competition advocacy to

³³ The regulations establish that the plans should be updated every five years or when a high percentage of operations require modification earlier. The environmental guarantees are required to ensure compliance with the closure plan. Regulations require that these guarantees be established upon approval of the closure plan, when they should be established upon authorization to start activities.

³⁴ Idem, note 28. [Optional link 4.](#)

³⁵ Chile (20th of 140), Colombia (53rd of 140), and Mexico (61st of 140).

³⁶ World Bank (2015).

³⁷ MEF (2019). In the informal sector, effective rates reach 400% (ASBANC, 2013).

³⁸ The MIPYME, Respaldo para la Pequeña y Mediana Empresa [Support for Small and Medium-Sized Enterprises], FOGEM, and FORPRO funds managed by Corporación Financiera de Desarrollo and Banco de la Nación.

³⁹ GCI (2017).

⁴⁰ OECD-IDB (2018). [Optional link 5.](#)

incorporate prior control of concentrations of businesses, to establish a model for a single body for free competition,⁴¹ to enhance free competition advocacy in public procurement, and to incorporate a rewards program in the framework of antitrust policy. In the long term it recommends measures including strengthening the institutional framework of the National Institute for Competition Advocacy and Intellectual Property Protection (INDECOPI), giving greater independence to management, and providing it with financial resources for the full-time work of the competition commissioners.

- 1.13 **Government bureaucracy** is one of the factors with the greatest impact on investment cost. Peru ranks 131st out of 137 in the indicator relating to the burden of government regulation on the GCI (2018).⁴² This indicator captures companies' perceptions of how burdensome it is to comply with government requirements (e.g., permits and reporting). In recent years the country has rolled out a series of measures to promote administrative simplification, which has led this indicator to improve slightly.⁴³ However, the country lacks a comprehensive system for the ex ante evaluation of projects for new regulations or those seeking to amend existing regulations, which leads to problems of overregulation, excessive rules that are difficult to interpret, and conflicts of authority among entities.⁴⁴ Although progress is being made in applying RQA to both new and existing regulations, there is a lack of institutional capacity to move forward with the implementation of the regulatory impact assessment (RIA) methodology, which is considered the best practice in this area.^{45,46} One area where the connection between government bureaucracy and the cost of investment is clearest is in business start-ups. Starting a business in Peru requires 7 procedures, 25 days, and a cost of 10% of per capita income, which is well above the OECD average (5, 9, and 3%, respectively). In addition, Peru has not implemented simplified business structures to create a company, unlike countries in the Pacific Alliance, which have significantly improved the aforementioned indicators.⁴⁷ Lastly, delivery of in-person public services is fragmented by the large number of service points managed by some 100 public bodies. There is a low level of deployment of Public Service Model (MAC) centers,⁴⁸ particularly outside Lima.
- 1.14 **The business environment for innovation.** Business innovation is contingent upon market failures, the public programs designed to offset them, and the institutions in charge of implementing them. In Peru, the contribution of innovation to TFP growth has been practically nil. Accounting for 0.12% of GDP, investment in

⁴¹ There is a first-instance administrative body and then a review body. Although this two-fold review was necessary as the free competition advocacy framework began to be implemented, the lessons learned have led to almost no objections being made by the review body, rendering it redundant.

⁴² GCI (2018).

⁴³ Legislative Decree 1310 of 2016 and Supreme Decree 075 of 2017 made regulatory quality analysis (RQA) compulsory for any regulation that establishes administrative procedures. RQA makes it possible to determine the legality or reasonableness of each administrative provision.

⁴⁴ OECD (2016).

⁴⁵ In addition to the reasonableness and legality of a regulation, the RIA also analyzes the costs associated with compliance (INDECOPI, 2018).

⁴⁶ INDECOPI examined 10,716 illegal or irrational bureaucratic barriers in 2017 and 2018, which generated a total cost of US\$100 million (INDECOPI, 2018).

⁴⁷ Business structures to digitally register a company without the need for a notary.

⁴⁸ MACs are public service centers with extended hours that seek to reduce waiting times and travel costs.

research and development (R&D) is among the lowest in the region.⁴⁹ The main obstacles to innovation reported by companies are: a shortage of qualified personnel (29% of companies), financing (24%), imitation (22%), and difficulties in cooperating with other actors (19%).⁵⁰ The country ranks 123rd out of 137 in company spending on R&D (GCI, 2018).

- 1.15 Since the mid-2000s, various public programs have been deployed (mostly tax incentives to address the aforementioned failures). Although some encouraging results have been seen, they are limited. Only 4% of innovative companies received public support,⁵¹ while 60% of them consider the programs to be inadequate. Such has been the case with the most important tax stimulus: the R&D tax incentive. Introduced in 2016, this mechanism has three limitations: it is too short, lasting only three years; there is uncertainty about eligibility; and there are restrictions on subcontracting external R&D units. In addition, there are two large gaps in the framework of instruments: (i) a lack of incentives for the development of a venture capital industry that would enable the scaling up of prototypes financed by tax incentives and (ii) a lack of mechanisms that would encourage innovative collaboration between universities and MSMEs. There is also a lack of regulation of a researcher's career, which prevents the establishment of incentives and an adequate performance evaluation system. Although there are tax funds from mining royalties to finance the technological infrastructure of regional universities, there are no clear guidelines for accessing these resources. Despite some improvements, Peru ranks 105th out of 137 in intellectual property protection.⁵² Policies in this particular area need to be modernized by incorporating new rights more suited to the needs of local businesses (e.g., geographical indications) and strengthening the legal framework for combating piracy which, together with smuggling, generates annual tax losses of US\$600 million (Sociedad Nacional de Industrias, 2018).
- 1.16 The effectiveness of public programs depends on the institutional framework. The governance of the National Science, Technology, and Technological Innovation System is complex due to the coexistence of several public actors that are difficult to coordinate. Under the Presidency of the Council of Ministers (PCM), the National Council for Science, Technology, and Technological Innovation (CONCYTEC) oversees the National Science, Technology, and Technological Innovation System.⁵³ In order to fulfil this function, this institution needs to strengthen its planning, coordination, and evaluation functions. The Peruvian Congress approved Law 30806 for these purposes, but its regulations have yet to be enacted. This is even more important since there are multiple programs that depend on different ministries, thus generating fragmentation, overlapping, and high management costs that require consolidation. In addition, 40 Productive Innovation and Technology Transfer Centers (CITE) have been created over the years, aimed at disseminating technologies among MSMEs lacking adequate governance and coordination of this

⁴⁹ The regional average is 0.68% (Red Iberoamericana de Indicadores de Ciencia y Tecnología [Ibero-American Network for Science and Technology Indicators], 2019). The OECD average is 2.68% (Main Science and Technology Indicators, 2019).

⁵⁰ National Statistics and Information Technology Institute (2015).

⁵¹ Below Chile (7%), Uruguay (10%), and Brazil (14%). IDB (2019).

⁵² GCI (2017).

⁵³ Law 28303.

network. As a national program under the Ministry of Production, the main organization supporting business innovation, the National Innovation Program for Competitiveness and Productivity (INNOVATE), has limitations in terms of operating flexibly to meet business demands. Strengthening the institutional framework is key to improving innovation policies.

- 1.17 **The new institutions for competitiveness.** Policies to improve productivity are complex, requiring sound public-private structuring and public-public coordination. The entity in charge of designing and implementing competitiveness policy is the National Council of Competitiveness and Formalization (CNCF), attached to the MEF.⁵⁴ To fulfill its role it needs to be strengthened functionally, considering not only policy planning, but also capacities for implementation and evaluation. The CNCF also needs to improve its coordination with the sector ministries involved in policy implementation. The CNCF coexists with specialized public-private cooperation units—called Sector Executive Boards—in the three priority sectors, which are still incipient. In order to improve effectiveness and coordination with the CNCF, it is important to establish a unit to coordinate these boards' work. Bureaucratic burdens also delay the execution of productive investment projects. Given the increasing socioenvironmental requirements to approve investment projects, particularly in natural resource sectors, OECD countries have created specialized units to facilitate the permitting required for strategic investment projects.⁵⁵ Peru created a unit with similar objectives in 2013, the Specialized Investment Monitoring Team (EESI), which was deactivated as a result of changes in political priorities. It is important to reactivate and strengthen the EESI and improve its coordination with the CNCF.
- 1.18 **The Government of Peru has prioritized increasing competitiveness.** The economic slowdown creates the need for policies that stimulate investment and innovation. Through the CNCF, the MEF approved the National Competitiveness and Productivity Policy (PNCP, 2019-2030) which lays the foundations for aligning public efforts for competitiveness.⁵⁶ More recently, the National Competitiveness and Productivity Plan was approved.⁵⁷ In addition, the MEF is moving forward on strengthening the CNCF and putting into operation units that specialize in facilitating investments and public-private coordination in priority sectors.⁵⁸ The Sector Executive Boards have defined a roadmap of reforms needed to improve sector competitiveness. The MEF is moving forward with the consolidation of various funds to finance MSMEs and the design of business structures that make forming a company more flexible. The PCM has made significant strides in applying RQA to existing regulations and plans to continue application of RIA. INDECOPI has completed the peer review of the free competition advocacy policy and is implementing the related suggestions. INACAL is commencing actions to decentralize its metrology services, while the MEF, CONCYTEC and the Ministry of Production are making headway in improving the institutional framework for

⁵⁴ Created by Supreme Decree 024-2002-PCM.

⁵⁵ Major Projects Management Office in Canada, Major Projects Facilitation Agency in Australia, and the Oficina de Gestión de Proyectos Sustentables [Sustainable Projects Management Office] in Chile.

⁵⁶ The priority areas are: (a) infrastructure; (b) human capital; (c) innovation; (d) financing; (e) job market; (f) business environment; (g) foreign trade; (h) institutional framework; and (i) environment. [Optional link 6.](#)

⁵⁷ This includes 84 measures aligned with the PNCP priority areas. [Optional link 7.](#)

⁵⁸ EESIs and Specialized Executive Board Teams (EEME).

innovation by setting up an Executive Board for Innovation to build consensus around the institutional reforms necessary in this area.

- 1.19 **Rationale for and summary of the reforms.** The Government of Peru requested a programmatic policy-based loan to boost productivity and improve competitiveness as a way to restore economic growth. The two main factors behind the slowdown in growth are the stagnation in TFP and in investment. A key factor in this performance is the deterioration of the business environment. Accordingly, the program proposes policy reforms that should lead to a recovery of private investment and greater innovation. On one hand, these reforms will improve the provision of complementary public goods, both crosscutting goods (e.g., improvement of the SNC and productive infrastructure) and goods specific to priority sectors (e.g., traceability and health controls). On the other hand, they seek to reduce investment costs by improving the terms of financing for MSMEs, strengthening competition, and streamlining the bureaucratic burden. The program also seeks to strengthen the national innovation system through improved tax incentives for private investment, the deployment of new instruments, the consolidation of existing instruments, and the protection of intellectual property. It recognizes that low competitiveness is a multisector problem and requires a coordinated long-term effort between the public and private sectors. This vision is embodied in the incorporation of a crosscutting theme of strengthening the CNCF and related institutions for adequate reform design, implementation, and monitoring. The programmatic series balances policy formulation actions in the first operation (76% of measures) and implementation actions in the triggers for the second operation (92% of measures). The operation targets reforms that improve the investment and innovation environment at the national level by strengthening the related institutional capacities. Challenges remain, however, such as strengthening the justice system and improving the business environment at the subnational level.
- 1.20 **Complementarity with other Bank operations.** This programmatic series targeting innovation and investment is complemented by the Program Supporting Reforms to Increase Productivity in Peru (loan 4714/OC-PE), with a focus on human capital, job markets, and efficiency in factor allocation. Both programmatic series constitute a coordinated strategy to support the country's productivity and competitiveness agenda and will alternate annually until 2021 with interlinked PNCP-aligned policy actions.
- 1.21 More specifically, this operation is complemented by three investment loans targeting business innovation: (loan 3700/OC-PE) supporting CITES, entrepreneurial financing, and public services; (loan 4399/OC-PE) entailing regulatory simplification, MAC centers, and forestry management; (loan 4604/SX-PE) with respect to strengthening the environmental management of Amazon forests. It is also complemented by four technical-cooperation operations, one for climate change adaptation in the fisheries sector (grant GRT/MC-14159-PE) and three in mining aimed at bolstering governance and increasing productivity (operations ATN/CN-18386-PE, ATN/CN-16977-PE, and ATN/CN-16432-PE). The program incorporates the reforms of the technical-cooperation operation to support the MEF's executive boards (operation ATN/OC-16693-PE), the peer review of

- competition policy,⁵⁹ and the Bank's support to the MEF with respect to the National Infrastructure Plan.
- 1.22 **Sector knowledge and lessons learned.** The operation design is based on the collaboration between the Bank and the country in the area of competitiveness. Notable in this regard is: (i) the experience in the execution of loans and technical cooperation projects relating to the operation's objectives; (ii) the exchange of good practices in productivity; and (iii) the studies conducted to support the operation's design and analyze key factors in terms of productivity, particularly the OECD-IDB peer review on competition policy.
- 1.23 Between 2010 and 2014, the Bank supported a first generation of reforms⁶⁰ that helped improve the business environment by facilitating, inter alia, new business start-ups, foreign trade, improved property registries, and access to financing through secured transactions. The institutional framework for productive development policies was also strengthened, through the creation of INACAL, for instance. To approximate the impact of these reforms, during this period the country moved up from 56th to 35th place in the World Bank's Doing Business rankings, while TFP contribution to growth increased by 10 percentage points. The main lessons from these interventions are:⁶¹ (a) focus not only on relatively high-impact crosscutting reforms but also on reforms that are key to strategic sectors; (b) ensure technical monitoring units have adequate competencies; (c) support reforms with technical cooperation funding; and (d) ensure a high-level commitment from the MEF. These lessons are taken into consideration in the program design, particularly as regards closing gaps in strategic sectors and strengthening the CNCF.
- 1.24 Within the framework of the Bank's country strategy, the IDB has supported the Government of Peru in defining and developing various policy measures in terms of productivity and competitiveness, through both policy-based loans and technical cooperation funding. With this support, implementing various investment programs in the program's targeted sectors has been framed within the productivity and competitiveness improvement policy and resources have been considered to facilitate implementation of the measures promoted by this operation.
- 1.25 With funds for the preparation of this loan, actions have been financed that have made it possible to strengthen the knowledge on which this operation is based: (a) external review of the National Competitiveness and Productivity Plan; (b) exchange of experiences between the CNCF and the Uruguayan National System for Productive Transformation and Competitiveness; and (c) exchange of knowledge between the EESI and the Sustainable Projects Management Office in Chile.

⁵⁹ IDB-OECD, 2018.

⁶⁰ Loans 2325/OC-PE, 2489/OC-PE, and 3299/OC-PE.

⁶¹ Loans 2325/OC-PE, 2489/OC-PE, and 3299/OC-PE. Project completion report.

- 1.26 Lastly, an IDB evaluation of the results of policy-based loans on competitiveness in eight countries in the region suggests that such programs have achieved concrete benefits, but additional research is required to assess the scope of long-term impacts on indicators such as economic growth and productivity.⁶²
- 1.27 **Coordination with other donors.** Work has been coordinated with the Swiss Agency for Development and Cooperation (within the Federal Department of Economic Affairs) in its support for the CNCF in terms of business climate and entrepreneurial financing. The preparation of the infrastructure plan has been coordinated with the Development Bank of Latin America (CAF). The World Bank is developing the subnational Doing Business index, which will provide inputs to improve the business environment at regional level. Various actions have been coordinated with the United Kingdom to develop the BIM plan. Lastly, a peer review of competition policy was conducted with the OECD, the recommendations of which includes the reforms under this program.
- 1.28 **Strategic alignment.** The operation is consistent with the Update to the Institutional Strategy 2010-2020 (document AB-3008) and is aligned with the challenges of increasing productivity and innovation by promoting improvements in the business environment for innovation and with the crosscutting themes of institutional capacity and rule of law, by strengthening the institutional framework for competitiveness, and climate change and environmental sustainability, by promoting a sustainable use of the country's forest and aquaculture resources. In all, 8% of the operation's resources are associated with policies fostering climate change mitigation activities, according to the [joint methodology of the multilateral development banks for tracking climate change adaptation finance](#). These resources contribute to the IDB Group target of increasing financing for climate-related projects to 30% of total approvals by the end of 2020. The operation is aligned with the Corporate Results Framework 2016-2019 (document GN-2727-6) indicators relating to government agencies benefited by projects that strengthen public service delivery, business climate reforms implemented, projects supporting innovation ecosystems, and companies supported by innovation activities. It is also consistent with the guidelines of the Innovation, Science, and Technology Sector Framework Document (document GN-2791-8) and is aligned with the priority area of the Sector Strategy on Institutions for Growth and Social Welfare (document GN-2587-2) relating to strengthening institutional capacities for innovation policies. It is also consistent with the Climate Change Sector Framework Document (document GN-2835-8) since some of the prioritized policies in the forestry and aquaculture sectors will contribute to the country's nationally determined contributions. In addition, it is aligned with the IDB Group Country Strategy with Peru 2017-2021 (document GN-2889) under three strategic objectives: support formalization of the economy, support business development, and strengthen the business climate. Lastly, the operation is included in the Update to Annex III of the 2019 Operational Program Report (document GN-2948-2).

⁶² Supporting Policy Reforms in Business Climate and Innovation in Latin America and the Caribbean. IDB-TN-1262.

B. Objectives, components, and cost

- 1.29 The general objective of the programmatic series is to support the Government of Peru in improving the economy's productivity and competitiveness. The specific objectives are to: (i) improve competitiveness by strengthening public institutions devoted to this purpose; (ii) expand private investment through policy commitments aimed at improving the environment for investment; and (iii) redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.
- 1.30 **Component 1. Macroeconomic stability.** This component seeks to promote an economic context consistent with the program objectives, as set out in the Policy Matrix (Annex II), and with the guidelines of the [Policy Letter](#).
- 1.31 **Component 2. Institutional framework for competitiveness.** The general objective of the component is to strengthen the institutional framework for implementing the PNCP. The specific objectives are to: (i) strengthen the CNCF and (ii) strengthen public-private and public-public coordination mechanisms in strategic sectors. With respect to the first specific objective, the first operation of the programmatic series recognizes (policy condition 2.1.1) that the MEF has enacted regulations for implementation of the new CNCF model, forming the new Board of Directors, the public-private technical committees, and the Technical Department. The indicative policy action for the second operation under this specific objective (trigger 2.1.1) is that the CNCF has prepared a proposal for a national competitiveness system that strengthens public-public and public-private coordination to implement the PNCP, including a framework to evaluate its impacts.
- 1.32 With respect to the second specific objective, the first operation of the programmatic series recognizes (policy condition 2.2.1) that, in order to improve the levels of public-private and public-public coordination, the MEF has created: (a) the EEME and (b) three Executive Boards in sectors with high competitive potential (forestry, aquaculture, and mining). It is also recognized (policy condition 2.2.2) that in order to move forward in facilitating strategic investment projects under the framework of the PNCP: (a) the MEF has reactivated the EESI and (b) the EESI has developed the initial bank of investment projects and has prioritized the list of strategic projects. The indicative policy actions for a second operation under this specific objective consider: (i) that the MEF has strengthened the EEME to consolidate their coordination team and have the resources to conduct studies and access specialized technical assistance to address reform priorities and institution-strengthening originating in the demands of the Sector Executive Boards, and that the EESI has been strengthened to have the resources necessary to: (a) strengthen team management and have the methodological tools necessary to measure the impact of the intervention; (b) conduct studies of investment project approval and monitoring processes; and (c) provide specialized technical assistance for the public institutions involved in the approval of investment projects (triggers 2.2.1 and 2.2.2).
- 1.33 **Component 3. Business environment for investment.** The overall objective of the component is to improve sector, crosscutting, and planning regulatory quality to drive investment. The specific objectives are to: (i) improve sector regulatory quality for investment in strategic productive sectors; (ii) improve crosscutting regulatory quality for investment by fostering free competition and greater market efficiency; and (iii) improve the planning, execution, and operation of public infrastructure

- investment at the national level. With respect to the first specific objective, the first operation in the programmatic series recognizes (policy condition 3.1.1) that the Executive Board for Forestry has coordinated the following activities to improve the sector's competitiveness: (a) preparation of draft forest and wildlife regulations prioritizing the penalization of actions that generate greater deforestation; (b) update of the official list of forest species to improve the effectiveness of strategic control posts; and (c) creation of a forest management agency in at least two regional governments in the country. In addition, this component recognizes that the Executive Board for Aquaculture has coordinated the following measures to improve the sector's competitiveness (policy condition 3.1.2): (a) alignment of the health standard for bivalve mollusks with EU law, updating zoning criteria in line with the European rule; (b) opening of the markets of Australia and the People's Republic of China to shrimp exports; (c) preparation of a draft aquaculture labor inspection protocol; and (d) approval of the aquaculture and fisheries environmental management regulations, regulating the certification of environmental requirements in aquaculture. Similarly, it has been recognized that the Mining Executive Board has coordinated the amendment of the Mine Closure Regulation to streamline the updating of closure plans and the management of environmental guarantees (policy condition 3.1.3).
- 1.34 The indicative policy actions for a second operation under the first specific objective of this component are: (i) the following measures have been coordinated to improve the competitiveness of the forestry sector: (a) implementation of the compulsory use of the Operations Book in forest operations; (b) creation of a forest management agency in each of the two remaining governments in the country; (c) preparation of the draft law to promote the forest sector; and (d) implementation of the new infrastructure and equipment for the Ucayali Forest CITE (trigger 3.1.1); (ii) expansion of markets has continued for the aquaculture sector, through: (a) starting implementation of the single window for aquaculture; (b) opening of the Brazilian market to Peruvian shrimp; (c) starting implementation of the National Fisheries Health Agency's process-based inspection and certification system; and (d) strengthening of the network of aquaculture CITEs (trigger 3.1.2); and (iii) in the mining sector, amending the regulatory framework for prior consultation to streamline the application of regulations during the prospecting phase of mining operations, while maintaining relations with communities and safeguarding the social license (trigger 3.1.3).
- 1.35 With respect to the second specific objective, the first operation of the programmatic series recognizes (policy condition 3.2.1) that the MEF has regulated the Crecer Fund for the implementation of guarantees, credit lines, and investment for the growth of MSMEs. Also recognized is that the new business structure of a "Sociedad por Acciones Cerrada Simplificada" ["Simplified Private Joint-Stock Company"] has been approved to incorporate companies digitally without the need for a notary (policy condition 3.2.2). The PCM has also ratified the new administrative procedures for the Executive Branch resulting from the RQA for corporate formalities (policy condition 3.2.3).
- 1.36 It is also recognized that in order to improve the framework for the defense and promotion of competition (policy condition 3.2.4): (a) the draft law on the single body for free competition advocacy has been prepared; (b) INDECOPI has approved the Guides to Combat Collusion in Public Procurement; and (c) the rewards program

- has been included in the framework of the law combatting anticompetitive practices. Under the second specific objective, it is also recognized that the draft law establishing prior control of mergers and acquisitions has been prepared so as to improve the functioning of the free competition advocacy framework (policy condition 3.2.5). Lastly, under the second specific objective, it is recognized that INACAL (policy condition 3.2.6): (a) has initiated the process of regional deconcentration of metrology services for the country's productive sector's; (b) has enabled the system of online sales to facilitate access to Peruvian technical standards; and (c) has included at least 100 Peruvian technical standards in the technical documentation for public procurement in collaboration with the central procurement body, Perú Compras.
- 1.37 The indicative policy actions for a second operation under the second specific objective are: (i) the trust fund of Corporación Financiera de Desarrollo (the Peruvian development bank) has been set up to make the Crecer Fund operational (trigger 3.2.1); (ii) the regulations for the new "Sociedad por Acciones Simplificada Cerrada" business structure to incorporate companies digitally without the need for a notary (trigger 3.2.2) have been approved; (iii) six MAC centers have been set up as a one-stop source for formalities for people and companies outside Lima (trigger 3.2.3); (iv) in order to continue to improve the framework for the defense and promotion of competition, the following has been done (trigger 3.2.4): (a) prepared the draft new national competition policy based on the recommendations of the IDB-OECD peer reviews; (b) prepared the new draft institutional framework law for INDECOPI strengthening the competitive and scaled independence and appointment for directors and commissioners; (c) promoted the appointment of the commissioners and/or representatives for the full-time work of the free competition advocacy commission; and (d) regulated the rewards program. The regulations to implement the Law on prior control of mergers and acquisitions have been approved (trigger 3.2.5). Lastly, the indicative policy actions for a second operation under the second specific objective also include: (a) extension of the regional deconcentration process for metrology services through the implementation of a third mobile laboratory; (b) start of the pre-investment study for a new metrology laboratory; (c) in cooperation with Perú Compras, inclusion of at least 120 Peruvian technical standards in public procurement technical documentation; and (d) in collaboration with Instituto Tecnológico de la Producción [Technology Institute for Production], accreditation of at least one testing or calibration procedure at at least six public CITEs in the CITE network under ISO/IEC-17025 (trigger 3.2.6).
- 1.38 With respect to the third specific objective, the first operation of the programmatic series recognizes the following: (i) the MEF, in coordination with the competent sectors, has a proposal in place for a national infrastructure plan that guides public and private investment for competitiveness purposes (policy condition 3.3.1); (ii) a provision has been included in the Government Procurement Law that promotes the compulsory and progressive adoption of digital information modeling tools throughout the entire project cycle in State-contracted public works (policy condition 3.3.2); and (iii) it has been ordered that the Dirección General de Programación Multianual de Inversiones [Directorate General for Multiannual Investment Programming] develop methodologies for the adoption and use of BIM in public investment processes (policy condition 3.3.3). The indicative policy actions under the third specific objective consider the following: (i) the MEF has adequate

- institutional arrangements to implement, monitor, and evaluate the national infrastructure plan (trigger 3.3.1); (ii) it has a BIM Peru Plan defining the national strategy for the related deployment in public investment management practices, with the participation of leading public, private, and actors from academia (trigger 3.3.2); and (iii) test projects to implement the BIM Peru Plan have been initiated (trigger 3.3.3).
- 1.39 **Component 4. Business environment for innovation.** The general objective of the component is to improve the regulatory quality for innovation support. The specific objectives are to: (i) manage the governance of the national innovation system and improve coordination among its members; (ii) improve the quality and broaden the scope of public policies supporting innovation; and (iii) facilitate access to and the strengthening of the protection of intellectual property rights. With respect to the first specific objective, the first operation of the programmatic series recognizes that the MEF has created the Innovation Executive Board in order to improve public-public and public-private coordination among members of the national innovation system (policy condition 4.1.1). It also recognizes that CONCYTEC has prepared the draft regulation of Law 30806 (the Framework Science, Technology, and Technological Innovation Law), strengthening the capacities of CONCYTEC as the system's lead agency (policy condition 4.1.2). It also recognizes that the Technology Institute for Production's competencies have been specified by establishing the functions relating to the management and running of the CITE network (policy condition 4.1.3). The indicative policy actions for a second operation under the first specific objective consider: (i) that the following have taken place: (a) INNOVATE operations have been integrated with the National Fisheries and Aquaculture Innovation Program; and (b) the institutional arrangement necessary to consolidate the existing programs into a national innovation agency has been defined (trigger 4.1.1); (ii) the organizational reforms necessary to implement Law 30806 have been launched (trigger 4.1.2); and (iii) a strategy to strengthen the management and coordination model for running the CITE network has been approved (trigger 4.1.3).
- 1.40 With respect to the second specific objective, the first operation of the programmatic series recognizes (policy condition 4.2.1) that CONCYTEC, together with the MEF, has proposed improvements to the tax benefit for the R&D+innovation expenditure of Law 30309 through: (a) preparation of the draft law, extending its effectiveness; (b) clarification of the eligibility for the R&D+innovation tax benefit for companies that have made already use of sector tax benefits; and (c) issuance of the directive making the procedures for use of the incentive through R&D+innovation centers more flexible. It also recognizes that the legislative framework to promote scientific research in Peru has been established (policy condition 4.2.2) and that technical guidelines have been approved for the execution of science, technology, and innovation projects financed using *canon* resources (specially earmarked tax revenue) at public universities (policy condition 4.2.3). It also recognizes that, in order to improve financing for entrepreneurial innovation, the Ministry of Production, through the National Innovation Program for Competitiveness and Productivity has: (a) awarded the competitive process for the instrument to support the demand for technological services and (b) approved financing for a private venture capital investment fund (policy condition 4.2.4). The indicative policy actions for a second operation under the second specific objective consider that: (i) the bill extending the

validity of the tax incentive for R&D+innovation expenditure established temporarily by Law 30309 has been sent to the Congress (trigger 4.2.1); (ii) the regulations for the Law to Promote the Development of Scientific Research have been issued, defining the parameters necessary to prioritize the career of scientific researcher (trigger 4.2.2); (iii) the guidelines for the preparation and evaluation of investment projects in science and technology and technological innovation have been approved (trigger 4.2.3); and (iv) through the National Innovation Program for Competitiveness and Productivity: (a) three competitive bidding processes have been launched for the instrument to support the demand for technological services; and (b) a project to support the creation of a private investment venture capital fund has begun (trigger 4.2.4).

- 1.41 With respect to the third specific objective, the first operation of the programmatic series recognizes (policy condition 4.3.1) that the law establishing new intellectual property rights appropriate to the country's potential has been enacted to facilitate access to the intellectual property system by enterprises (guaranteed traditional specialties and geographical indications). It also acknowledges that the draft of the Law on the Observance of Intellectual Property Rights (Antipiracy Law) has been prepared (policy condition 4.3.2). The indicative policy actions for a second operation under the third specific objective consider that: (i) the regulations governing the rights arising from geographical indications and traditional specialties guaranteed (trigger 4.3.1) have been approved and (ii) the draft of the Law on the Observance of Intellectual Property Rights (Antipiracy Law) (trigger 4.3.2) has been submitted to the Congress.
- 1.42 **Beneficiaries.** The beneficiaries are the formal productive companies of Peru in general⁶³ and, in particular, those operating in the forestry, aquaculture, and mining sectors. Formal innovative companies (those investing in innovation) and innovative entrepreneurs are also beneficiaries, as these groups will benefit from the improvements in public policies described in the program components.

C. Key results indicators

- 1.43 The impact of the reforms based on the program's general objective will be measured using three indicators: (i) percentage of annual GDP growth attributable to TFP; (ii) gross private domestic investment as a percentage of GDP; and (iii) the GCI. With respect to the specific objectives, the impact indicators are: (i) annual sales per employee of companies in the aquaculture and industrial sectors associated with forestry and mining operations (associated with specific objective 1); (ii) investment as a percentage of revenue of companies in the same sectors (associated with specific objective 2); and (iii) private investment in manufacturing innovation as a percentage of total investment (associated with specific objective 3). Outcome indicators are designed to measure more immediate effects attributable to the reforms. The following have been selected: (i) the progress of the investment made in private-public partnerships relating to EESI-supported road projects as a percentage of the investment committed; (ii) indebtedness as a percentage of the revenue of the companies in the aforementioned sectors as a way of approximating the investment effort; (iii) aquaculture company exports to Australia, Europe, and

⁶³ In Peru there are 2.3 million registered formal companies (National Statistics and Information Technology Institute, 2018).

China (markets to be opened under this operation); and (iv) private investment in innovation by manufacturing companies that receive public support for investment in innovation as a percentage of sales.

- 1.44 **Economic analysis.** Based on the recommendations of the Office of Evaluation and Oversight in its 2011 Evaluability Review of Bank Projects⁶⁴ and the findings of the review of evaluation practices and standards for policy-based loans, conducted by the Evaluation Cooperation Group (composed of the independent evaluation offices of the multilateral development banks)⁶⁵ as established in paragraph 1.3 of the Review of the Development Effectiveness Matrix for Sovereign Guaranteed and Non-sovereign Guaranteed Operations (document GN-2489-5), which indicates, inter alia, that an analysis of efficiency in the use of financial resources would be unnecessary,⁶⁶ it was determined and reported to the Bank's Board of Executive Directors that no economic analysis will be performed for this type of loan. Accordingly, this loan operation does not include an economic analysis, and the economic analysis has therefore not been considered for measuring the evaluability score in the corresponding Development Effectiveness Matrix.

II. FINANCING STRUCTURE AND MAIN RISKS

A. Financing instruments

- 2.1 This programmatic policy-based loan seeks to boost productivity and improve competitiveness. This loan is the first of two operations that are technically linked, but independently financed, in accordance with Policy-based Loans: Guidelines for Preparation and Implementation (document CS-3633-2). The rationale underlying this structure and instrument is that it: (i) promotes ongoing policy dialogue with the country as regards productivity and competitiveness, which is multisectoral by nature and (ii) facilitates the monitoring of the reform implementation strategy, since certain reforms require complex implementation, take time, and require complex coordination between agencies and levels of government. The instrument also offers the flexibility to adapt to new knowledge acquired during the execution of the agreed measures.
- 2.2 **Dimensioning.** This first operation amounts to US\$50 million financed with resources from the Ordinary Capital.⁶⁷ This amount will be paid out in a single disbursement and is justified by the country's need for fiscal resources in the broad sense, although it is not directly related to the costs of reforms under paragraph 3.27(b) of document CS-3633-2. The operation represents 0.54% of public sector financing requirements for 2019 and 1.08% of multilateral financing.

⁶⁴ Document RE-397-1: "Currently, Economic Analysis section is computed as the maximum between the [cost-benefit analysis] and the [cost-effectiveness analysis]. Yet neither a [cost-benefit analysis] nor a [cost-effectiveness analysis] is applicable to policy-based loans [...]."

⁶⁵ Good Practice Standards for the Evaluation of Public Sector Operations. Evaluation Cooperation Group, Working Group on Public Sector Evaluation, 2012 Revised Edition. February 2012.

⁶⁶ According to the Evaluation Cooperation Group, policy-based loans should be evaluated in terms of relevance, effectiveness, and sustainability. Efficiency was not included as a criterion, since the dimensioning of policy-based loans is linked to a country's financing gap, independent of the project's benefits.

⁶⁷ The second operation is tentatively planned for 2021 for a similar amount.

B. Environmental and social risks

- 2.3 Pursuant to Policy Directive B.13 of the Environment and Safeguards Compliance Policy (Operational Policy OP-703), this program does not require classification. The operation directly supports policy actions and instruments aimed at improving productivity and competitiveness and will not finance infrastructure investments or works. As such, no socioenvironmental risks are foreseen.

C. Fiduciary risks

- 2.4 No fiduciary risks are identified. Loan proceeds will go directly to the Treasury account to cover the national government's financing needs, for which the executing agency has adequate financial management instruments and control systems.

D. Other risks and key issues

- 2.5 **Development.** A medium-level risk was identified in the political context that may lead to institutional instability and shifts in sector priorities that would result in the indicative policy conditions of the second phase not being met. This risk will be mitigated by three actions: (i) ongoing monitoring of the implementation of commitments; (ii) identification of possible delays due to changes in authorities or policy stances; and (iii) search for high-level dialogue spaces to reinforce the importance of achieving key reform milestones, demonstrate progress, and agree on the next steps.
- 2.6 **Public management and governance.** Two medium-level risks were identified; the first relates to the limited coordination existing among the various public actors in terms of productivity policies and the second to the weak public-private collaboration to implement the reforms aimed at improving productivity and competitiveness. Both would delay fulfilment of the policy conditions of the second phase. These risks will be mitigated by strengthening the capacities of the CNCF, the EEME, and the EESI to promote public-public coordination and by supporting the CNCF in the design of a national competitiveness system through a technical cooperation project for operational support, which is being prepared.
- 2.7 **Monitoring and accountability.** A high level of risk was identified due to the lack of monitoring systems and methodologies to evaluate the impact of the measures contained in the program, which would preclude a reliable verification of the impact. To mitigate this problem, the program looks to create monitoring and evaluation capacities for the CNCF under the MEF, supported by a technical cooperation project so that the CNCF has a results framework in place to evaluate the National Competitiveness and Productivity Plan.
- 2.8 **Sustainability.** The government's commitment to the reforms is reflected in the fact that most of the reforms have been included in the 2019-2030 National Competitiveness and Productivity Plan. However, the sustainability of the reforms requires strengthening the institutional capacities of the CNCF and the EEME and EESI coordinating bodies. The program includes explicit measures to strengthen these organizations. This is complemented by the Bank's support through a technical cooperation operation providing operational support to deepen the technical dialogue and support the implementation of the proposed reforms. At the same time, fluid dialogue will be maintained with the private sector organizations represented in the CNCF in order to support the continuity of the reforms.

III. IMPLEMENTATION AND MANAGEMENT PLAN

A. Summary of implementation arrangements

- 3.1 The borrower is the Republic of Peru and the executing agency of the program is the MEF through the Directorate General of the Public Treasury (DGTP). The technical coordination necessary to successfully implement the program will be the responsibility of the MEF, through the DGTP, and the actions and the implementation thereof will be the responsibility of the sector agencies. The DGTP will be responsible for preparing and submitting the disbursement request to the Bank, as well as for the program's financial and control matters. It will also be responsible for providing information on the progress made with respect to the program's Policy Matrix and Results Matrix, as well as submitting to the Bank the documentation on the means of verification for each of the policy conditions.
- 3.2 In addition, the DGTP will be responsible for: (i) coordinating between the various entities of the borrower in charge of adopting measures or technical execution of activities; (ii) monitoring and promoting fulfillment of the program's activities to ensure their successful execution; (iii) maintaining official communication with the Bank for the technical aspects of the program; (iv) gathering all information necessary for the monitoring and evaluation of the program and collecting, filing, and making available to the Bank all information, indicators, and parameters related to the program; (v) preparing the necessary reports in the established time frames and with the expected level of quality; (vi) anticipating and properly resolving strategic, technical, and coordination problems and risks associated with program execution; and (vii) coordinating monitoring meetings with the Bank and collaborating with the program's ex post evaluation.
- 3.3 **Technical dialogue.** The technical dialogue will be led by the CNCF, through its Technical Department, and it will monitor the measures included in the National Competitiveness and Productivity Plan in accordance with Supreme Decree 237-2019-EF; and it will participate in the evaluation of the program, among other actions. For these functions, the CNCF Technical Department will coordinate with the DGTP and the EEME and EESI teams, among other key actors.
- 3.4 **Special contractual conditions precedent to the first and only disbursement of the loan. The first and only disbursement is contingent upon fulfillment of the policy reform conditions as set out in the Policy Matrix (Annex II), the [Policy Letter](#), and the other terms established in the loan contract.**

B. Summary of arrangements for monitoring results

- 3.5 **Monitoring.** Given the nature of the operation, monitoring focuses on: (i) verifying compliance with the policy actions of the first operation, as detailed in the Policy Matrix (Annex II) and the [Means of Verification Matrix](#), and (ii) monitoring the implementation of indicative policy actions for a second operation. Once the loan has been disbursed, the executing agency will be responsible for sending the Bank a semiannual report on the implementation of the indicative policy actions for a second operation (see [monitoring and evaluation plan](#)).
- 3.6 **Evaluation.** Evaluation methodologies for program outcomes and impacts are nonexperimental and rely on the use of the difference in differences methodology with common support for most of the indicators. The identification will use company

level information from the Encuesta Económica Anual [Annual Economic Survey] to simulate the counterfactual situation of the absence of the program in the sectors addressed by the policy commitments in three verticals: aquaculture, forestry, and mining. In certain cases, for indicators measured at the aggregate level, the evaluation will be reflexive by comparing the situation before and after (see [monitoring and evaluation plan](#)).

IV. POLICY LETTER

- 4.1 The Bank and the Government of Peru have agreed on the macroeconomic and sector policies included in the [Policy Letter](#), which will be submitted by the MEF and describes the main components of the Government's strategy for this program, reaffirming its commitment to implement the agreed-on activities.

Development Effectiveness Matrix		
Summary		PE-L1244
I. Corporate and Country Priorities		
1. IDB Development Objectives		Yes
Development Challenges & Cross-cutting Themes		-Productivity and Innovation -Climate Change and Environmental Sustainability -Institutional Capacity and the Rule of Law
Country Development Results Indicators		-Government agencies benefited by projects that strengthen technological and managerial tools to improve public service delivery (#)* -Business environment reforms enacted (#)* -Projects supporting innovation ecosystems (#)* -Companies supported in innovation activities (#)*
2. Country Development Objectives		Yes
Country Strategy Results Matrix	GN-2889	Support the formalization of the economy, support business development; and strengthen the business climate.
Country Program Results Matrix	GN-2948-2	The intervention is included in the 2019 Operational Program.
Relevance of this project to country development challenges (If not aligned to country strategy or country program)		
II. Development Outcomes - Evaluability		Evaluable
3. Evidence-based Assessment & Solution		8.6
3.1 Program Diagnosis		2.4
3.2 Proposed Interventions or Solutions		4.0
3.3 Results Matrix Quality		2.2
4. Ex ante Economic Analysis		N/A
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		Medium
Identified risks have been rated for magnitude and likelihood		Yes
Mitigation measures have been identified for major risks		Yes
Mitigation measures have indicators for tracking their implementation		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. Procurement: Information System, Price Comparison, Contracting Individual Consultant, National Public Bidding.
Non-Fiduciary	Yes	Strategic Planning National System, Monitoring and Evaluation National System, Statistics National System.
The IDB's involvement promotes additional improvements of the intended beneficiaries and/or public sector entity in the following dimensions:		
Additional (to project preparation) technical assistance was provided to the public sector entity prior to approval to increase the likelihood of success of the project	Yes	The program is complemented by 4 CTs - one on adaptation for climate change in the fishing sector (GRT/MC-14159-PE); and three supporting the mining sector in its governance and productivity (ATN/CN-18386-PE;ATN/CN-16977-PE;ATN/CN-16432PE). The program also benefits the support reforms of the MEF roundtables in the review on policy for competition (ATN/OC-16693-PE).

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

In spite of uninterrupted growth during 20 years in Peru; the evolution of productivity has been negative since 2012. Productivity is what explains growth due to a better, or more efficient, use of production factors and is associated to productive investment and infrastructure. In Peru investment has stagnated since 2013 and its export basket is undifferentiated. Firm-level competitiveness has declined 11 places between 2012-2017; per the Global Competitiveness Index (GCI). In Peru, the National System of Quality Certification is incipient, and it is necessary for the accreditation of products and their insertion in global markets. Only 8/10,000 Peruvian firms have ISO 9001 certifications. Moreover, the country occupies the 86th position out of 137 in the infrastructure pillar of the ICG. Two high-potential sectors given their resources and comparative advantages, forestry and aquaculture, are scarcely linked to international commerce representing only 0.26% and 0.6% of the country's exports respectively. In addition, the mining sector, that does accumulate 60% of the country's exports, faces challenges with deficient regulations and the growing demand relating to environmental sustainability. In Peru – high investment costs, issues with competition, and a lacking regulation and support for innovation make improvements in productivity and accessing new markets difficult; as is the case for the 3 sectors highlighted. This program marks a collaboration with the government to reform the ecosystem for productivity and is the first operation of a PBP. The general objective is to support the government in improving productivity and competitiveness of the economy. The specific objectives are: (i) improve competitiveness through strengthening public institutions dedicated to this end; (ii) increase private investment via policy commitments aimed at improving the investment climate; and (iii) increase the effort for innovation via policy commitments aimed at improving the ecosystem for innovation. The reforms aim to facilitate strategic investments; promote innovation at the firm level; and catalyze investment within the strategic sectors; as well as promoting competition. The outputs within the Results Matrix correspond to the initiatives outlined in the Policy Matrix. The Results Matrix captures several benefits, such as, for example: debt levels of the sectors of interest as a proxy for investment; the exports of aquaculture products to key markets; private investment in innovation by firms supported by government programs; amongst others. At closure, an impact evaluation will be conducted using differences-in-differences combined with propensity score matching to obtain a control group and identify results of beneficiary firms.

POLICY MATRIX

Objective: The general objective of the programmatic series is to support the Government of Peru in improving the economy's productivity and competitiveness. The specific objectives are to: (i) improve competitiveness by strengthening public institutions devoted to this purpose; (ii) expand private investment through policy commitments aimed at improving the environment for investment; and (iii) redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.

Components / Policy Objectives	Policy Conditions		Status of Fulfillment of the Programmatic Conditions ¹	Triggers	
	First Programmatic Operation			Second Programmatic Operation	
Component 1. Macroeconomic stability					
1.1 Maintenance of an economic context consistent with the program objectives and with the guidelines of the Sector Policy Letter.	1.1.1 Ensure the maintenance of a macroeconomic context consistent with the program objectives as set out in the Policy Matrix and the Policy Letter.		Fulfilled		1.1.1 Ensure the maintenance of a macroeconomic context consistent with the program objectives as set out in the Policy Matrix and the Policy Letter.
Component 2. Institutional framework for competitiveness					
2.1 Strengthen the institutional framework for the implementation of the PNCP	2.1.1 The MEF has enacted regulations for the new CNCF model, forming a new Management Board, the public-private technical committees, and the Technical Department.		Fulfilled (Q1 2019)		2.1.1 A proposal has been prepared for a national competitiveness system that strengthens public-public and public-private coordination to implement the PNCP, including a framework to evaluate the related impacts.
2.2 Strengthen public-private and public-public coordination mechanisms for competitiveness in strategic productive sectors.	2.2.1 The MEF, in order to improve the levels of public-private and public-public coordination, has created: (a) the EEME and (b) three Executive Boards in sectors with high competitive potential (forestry, aquaculture, and mining).		Fulfilled (Q1 2019)		2.2.1 The EEME has been strengthened to consolidate its coordination team and has the resources in place to conduct studies and access specialized technical assistance to address priorities for reform and institution-strengthening arising from the demands of the Sector Executive Boards.
	2.2.2 In order to move forward in facilitating strategic investment projects within the framework of the PNCP: (a) the MEF has reactivated the EESI and (b) the EESI has developed an initial bank of investment projects and the list of strategic projects has been prioritized.		Fulfilled (Q3 2019)		2.2.2 The EESI has been strengthened so as to have the necessary resources: (a) to strengthen team management and have methodological tools to measure the impact of its intervention; (b) conduct studies of approval processes and monitor investment projects; and (c) provide specialized technical assistance to the public institutions involved in the approval of investment projects.

¹ This information is merely indicative as of the date of this document. Pursuant to Policy-based Loans: Guidelines for Preparation and Implementation (document CS-3633-2), the fulfillment of all specified conditions for disbursement, including the maintenance of an appropriate macroeconomic policy framework, will be verified by the Bank when the borrower requests the corresponding disbursement and will be duly reflected in the disbursement eligibility memorandum.

Components / Policy Objectives	Policy Conditions First Programmatic Operation	Status of Fulfillment of the Programmatic Conditions ¹	Triggers Second Programmatic Operation
Component 3. Business environment for investment			
3.1 Improve sector regulatory quality for investment in strategic productive sectors.	3.1.1 The Forestry Executive Board has coordinated the following measures to improve the competitiveness of the forest sector: (a) preparation of draft forest and wildlife regulations prioritizing the penalization of actions that generate greater deforestation; (b) update of the official list of forest species to improve the effectiveness of strategic control posts; and (c) creation of a forest management agency in at least two regional governments with forest regions.	Fulfilled (Q2 2019)	3.1.1 The following measures have been coordinated to improve the competitiveness of the forest sector: (a) implementation of the compulsory use of the Operations Book in forest operations; (b) creation of a forest management agency in each of the country's two remaining governments with forest regions; (c) preparation of the draft law to promote the forest sector by integrating tax, financial, registration, control, and innovation measures to develop the sector; and (d) implementation of the new infrastructure and equipment of the Ucayali Forest CITE.
	3.1.2 The Aquaculture Executive Board has coordinated the following measures to improve the competitiveness of the aquaculture sector: (a) alignment of the health standard for bivalve mollusks with EU law, updating zoning criteria in line with EU law; (b) opening of the markets of Australian and the People's Republic of China to shrimp exports; (c) preparation of the draft aquaculture labor inspection protocol; and (d) approval of the aquaculture and fisheries environmental management regulations, regulating the certification of environmental requirements in aquaculture.	Fulfilled (Q3 2019)	3.1.2 There has been continued expansion of markets for the aquaculture sector through the: (a) implementation of the single window for aquaculture; (b) opening of the Brazilian market to Peruvian shrimp; (c) National Fisheries Health Agency's process-based inspection and certification system; and (d) strengthening of the network of aquaculture CITEs.
	3.1.3 The Mining Executive Board has coordinated the amendment of the Mine Closure Regulation to streamline the updating of closure plans and the management of environmental guarantees.	Fulfilled (Q2 2019)	3.1.3 The regulatory framework for prior consultation has been amended to streamline its application during the prospecting phase of mining operations, maintaining the relationship with communities and safeguarding the social license.

Components / Policy Objectives	Policy Conditions First Programmatic Operation	Status of Fulfillment of the Programmatic Conditions ¹	Triggers Second Programmatic Operation
3.2 Improve crosscutting regulatory quality for investment by fostering free competition and more efficient markets.	3.2.1 The MEF has regulated the Crecer Fund to implement guarantees, lines of credit, and investment for MSME growth.	Fulfilled (Q1 2019)	3.2.1 The trust fund of COFIDE (the Peruvian development bank) has been set up to make the Crecer Fund operational.
	3.2.2 The new business structure of a “Sociedad por Acciones Cerrada Simplificada” has been approved to incorporate companies digitally without the need for a notary.	Fulfilled (Q3 2018)	3.2.2 The regulations for the new business structure of a “Sociedad por Acciones Cerrada Simplificada” have been approved to incorporate companies digitally without the need for a notary.
	3.2.3 The PCM has ratified the new administrative procedures of the executive branch resulting from the RQA for corporate formalities.	Fulfilled (Q2 2019)	3.2.3 Six MAC centers have been set up as a one-stop source for people and companies outside Lima.
	3.2.4 To improve the competition advocacy and promotion framework: (a) the draft law on the single body for free competition advocacy has been prepared; (b) INDECOPI has approved the Guide to Free Competition in Public Procurement; and (c) the rewards program has been included in the framework of the free competition advocacy law.	Fulfilled (Q2 2019)	3.2.4 To continue to improve the competition advocacy and promotion framework: (a) a draft new national competition policy based on the recommendations of the IDB-OECD peer review has been prepared; (b) a new INDECOPI institutional framework law has been proposed, strengthening the independence and staggered and competition-based appointment of directors and commissioners; (c) the appointment of the commissioners and/or directors for the full-time work of the Free Competition Advocacy Commission has been promoted; and (d) the rewards program has been regulated.
	3.2.5 The draft law establishing the prior control of mergers and acquisitions has been prepared to improve the functioning of the free competition advocacy framework.	Fulfilled (Q2 2019)	3.2.5 The regulations to implement the law on the prior control of mergers and acquisitions have been approved.

Components / Policy Objectives	Policy Conditions First Programmatic Operation	Status of Fulfillment of the Programmatic Conditions ¹	Triggers Second Programmatic Operation
	3.2.6 INACAL: (a) has initiated the process of regional deconcentration of metrology services for the country's productive sectors; (b) has implemented the system of online sales to facilitate access Peruvian technical standards; and (c) has included at least 100 Peruvian technical standards in the technical documentation for public procurement in collaboration with the central procurement body, Perú Compras.	Fulfilled (Q3 2019)	3.2.6 (a) The process of regional deconcentration of metrology services has been extended through the implementation of a third mobile laboratory; (b) the pre-investment study for a new metrology laboratory has been initiated; (c) in cooperation with Perú Compras, at least 120 Peruvian technical standards have been included in the public procurement technical documentations; and (d) in collaboration with the Technology Institute for Production, at least one testing or calibration procedure has been accredited in at least six public CITE centers in the CITE network under ISO/IEC-17025.
3.3 Improve the planning, execution, and operation of public infrastructure investment at the national level.	3.3.1 The MEF, in coordination with the competent sectors, has a proposed national infrastructure plan to steer public and private investment for competitiveness purposes.	Fulfilled (Q3 2019)	3.3.1 An adequate institutional arrangement is in place to implement, monitor, and evaluate the national infrastructure plan.
	3.3.2 A provision has been included in the Public Procurement Law that promotes the compulsory and progressive adoption of digital information modeling tools throughout the project cycle in State-contracted public works.	Fulfilled (Q3 2018)	3.3.2 A BIM Peru Plan is in place that defines the national strategy for the related deployment in public investment management practices, with the participation of leading public, private, and academic actors.
	3.3.3 The Directorate General for Multiannual Investment Programming has been ordered to develop methodologies for the adoption and use of BIM in public investment processes.	Fulfilled (Q4 2018)	3.3.3 Test projects to implement the BIM Peru Plan have been initiated.
Component 4. Business environment for innovation			
4.1 Manage the governance of the national innovation system and improve coordination among its members.	4.1.1 The MEF has created the Innovation Executive Board in order to improve public-public and public-private coordination among members of the innovation system.	Fulfilled (Q4 2018)	4.1.1 (a) INNOVATE operations have been integrated with the National Fisheries and Aquaculture Innovation Program and (b) the institutional arrangements necessary to consolidate the existing programs into a national innovation agency have been defined.

Components / Policy Objectives	Policy Conditions First Programmatic Operation	Status of Fulfillment of the Programmatic Conditions ¹	Triggers Second Programmatic Operation
	4.1.2 CONCYTEC has prepared the draft regulations of Law 30806 (the Framework Science, Technology, and Technological Innovation Law), strengthening CONCYTEC's capacities as the system's lead agency.	Fulfilled (Q3 2019)	4.1.2 CONCYTEC's organizational reforms necessary to implement Law 30806 have been implemented.
	4.1.3 The Technology Institute for Production's competencies have been specified by establishing the functions relating to the management and operation of the CITE network.	Fulfilled (Q3 2018)	4.1.3 A strategy to strengthen the management and coordination model for operation of the CITE network has been approved.
4.2 Improve the quality and broaden the scope of public policies supporting innovation.	4.2.1 CONCYTEC, together with the MEF, has proposed improvements to the tax benefit on expenditures relating to scientific research, technological development, and technological innovation (R&D+innovation) of Law 30309 through: (a) the preparation of the draft law extending its validity; (b) the clarification of eligibility for the R&D+innovation tax benefit for companies that have already gained access to sector tax benefits; and (c) the issuance of the directive making the procedures to make use of the incentive through R&D+innovation centers more flexible.	Fulfilled (Q3 2019)	4.2.1 The draft law extending the validity of the tax incentive for R&D+innovation expenditure established on a temporary basis by Law 30309 has been sent to the Congress.
	4.2.2 The legislative framework to promote scientific research in Peru has been established.	Fulfilled (Q2 2019)	4.2.2 The regulations for the Law to Promote Careers in Scientific Research have been implemented, defining the parameters necessary to organize the career of the scientific researcher.
	4.2.3 The technical guidelines for the execution of science, technology, and technological innovation projects financed with <i>canon</i> resources at public universities have been approved.	Fulfilled (Q4 2018)	4.2.3 The guidelines for the preparation and evaluation of investment projects in science, technology, and technological innovation have been approved.

Components / Policy Objectives	Policy Conditions First Programmatic Operation	Status of Fulfillment of the Programmatic Conditions ¹	Triggers Second Programmatic Operation
	4.2.4 In order to improve financing for investment in business innovation, through INNOVATE the Ministry of Production: (a) has completed a competitive bidding process for the instrument to support the demand for technological services and (b) has approved financing for a private venture capital investment fund.	Fulfilled (Q3 2019)	4.2.4 Through INNOVATE (a) three competitive bidding processes for the instrument to support the demand for technological services have been completed; and (b) a project to support the establishment of a private venture capital investment fund has been implemented.
4.3 Facilitate access to and the strengthening of the protection of intellectual property rights.	4.3.1 The law establishing new intellectual property rights appropriate to the country's potential that facilitate companies' access to the intellectual property system has been enacted (traditional specialties guaranteed and geographical indications).	Fulfilled (Q3 2018)	4.3.1 The regulations governing the rights arising from geographical indications and traditional specialties guaranteed have been approved.
	4.3.2 The draft of the Law on the Observance of Intellectual Property Rights (Antipiracy Law) has been prepared.	Fulfilled (Q2 2019)	4.3.2 The draft of the Law on the Observance of Intellectual Property Rights (Antipiracy Law) has been submitted to the Congress.

RESULTS MATRIX

Project objective	The general objective of the programmatic series is to support the Government of Peru in improving the economy's productivity and competitiveness. The specific objectives are to: (i) improve competitiveness by strengthening public institutions devoted to this purpose; (ii) expand private investment through policy commitments aimed at improving the environment for investment; and (iii) redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.
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EXPECTED IMPACTS

Indicators	Unit of measure	Baseline	Baseline year	Target (2023)	Means of verification	Observations
Overall expected impact (related to the general objective): Increased productivity and competitiveness.						
Percentage of annual GDP growth rate attributable to changes in TFP	%	19.0	2017	25.0	Penn World Table (PWT)	Baseline corresponds to the annual average 2011-2017 GDP growth attributable to the TFP and solely considers periods where PWT9.1 recorded GDP and TFP growth. The target implies recovery to the previous decade's average. The evaluation will be reflexive using a before and after comparison.
Private investment (as % of GDP)	%	16.6	2018	18.0	BCRP Weekly Report	Baseline corresponds to private investment according to BCRP Table 91 ("Macroeconomic indicators," Weekly Report). The evaluation will be reflexive using a before and after comparison.
Global Competitiveness Index	Index	61.3	2018	61.6	World Economic Forum Global Competitiveness Report	Baseline corresponds to the index (version 4.0) of the 2018 edition of the report. The target is equivalent to rising three positions in the ranking (equivalent to the index for Colombia). The evaluation will be reflexive using a before and after comparison.
Expected impact 1 (related to specific objective 1): Improve competitiveness by strengthening public institutions devoted to this purpose.						
Value added per employee in aquaculture companies and in the industrial sectors associated with forestry and mining operations	Ratio (thousands of US\$ per employee)	34.0	2016	45.0	Annual Economic Survey	Baseline corresponds to the average of the ratio of value added to employment of companies in the aquaculture, forestry, and mining sectors based on the 2017 Annual Economic Survey. The evaluation will use difference-in-differences matching with comparable companies outside the targeted sectors.
Expected impact 2 (related to specific objective 2): Expand private investment through policy commitments aimed at improving the environment for investment.						
Investment by companies in the aquaculture sector and industrial sectors associated with forestry and mining operations (ratio to net revenue)	Ratio	0.5	2016	0.6	Annual Economic Survey	Baseline corresponds to the average of the ratio of fixed assets to the net revenue of companies in the aquaculture, forestry, and mining sectors based on the 2017 Annual Economic Survey. Non-current fixed assets are used as a proxy for investment. The evaluation will use difference-in-differences matching with comparable companies outside the targeted sectors.

Indicators	Unit of measure	Baseline	Baseline year	Target (2023)	Means of verification	Observations
Expected impact 3 (related to specific objective 3): Redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.						
Investment in innovation by manufacturing companies (% of sales)	%	3.2	2014	3.4	Innovation Survey of the National Statistics and Information Technology Institute	Baseline based on 2015 Innovation Survey of the National Statistics and Information Technology Institute. Since the entire sample is used to construct the ratio, the evaluation will be reflexive using a before and after comparison.

EXPECTED OUTCOMES

Indicators	Unit of measure	Baseline	Baseline year	Target (2021)	Means of verification	Observations
Expected outcome 1 (related to specific objective 1): Improve competitiveness by strengthening public institutions devoted to this purpose.						
Investment made in EESI public-private partnership road projects (% of investment committed)	%	44.6	2017	50.0	Annual performance reports on road concessions by OSITRAN (body supervising investment in transport infrastructure for public use)	Baseline corresponds to the percentage of completion of public-private partnership investments included in the EESI priority list supervised annually by OSITRAN. The evaluation will compare the change in this indicator with the change observed in other OSITRAN-supervised road concessions.
Expected outcome 2 (related to specific objective 2): Expand private investment through policy commitments aimed at improving the environment for investment.						
Indebtedness by companies in the aquaculture sector and industrial sectors associated with forestry and mining operations (ratio to net revenue)	Ratio	0.16	2016	0.21	Annual Economic Survey	Baseline corresponds to the average of the ratio of current and non-current financial obligations to the net revenue of companies in the aquaculture, forestry, and mining sectors reported in the 2017 Annual Economic Survey. The evaluation will use difference-in-differences matching with comparable companies outside the targeted sectors.
Exports of aquaculture products to Australia, Europe, and China (% of total exports)	%	3.7	2016	5.0	Foreign trade administrative registries of SUNAT (the Peruvian customs and tax agency)	Baseline corresponds to the total exports of aquaculture tariff items benefiting from the reforms promoted by the program (mollusks, shrimp, and Peruvian scallops) and to the specific commercial destinations recognized in the program commitments (Australia, Europe, and China) as a percentage of total exports. The evaluation will be reflexive using a before and after comparison.

Indicators	Unit of measure	Baseline	Baseline year	Target (2021)	Means of verification	Observations
Expected outcome 3 (related to specific objective 3): Redouble the effort in innovation through policy commitments aimed at improving the environment for innovation.						
Private investment in innovation by manufacturing companies receiving public support for investment in innovation (% of sales)	%	6.6	2014	9.0	Innovation Survey of the National Statistics and Information Technology Institute	Baseline based on 2015 Innovation Survey of the National Statistics and Information Technology Institute. Baseline calculated from a subsample of companies reporting positive amounts of investment in innovation and answering "no" to the question of whether this investment was financed with public support. The evaluation will use difference-in-differences matching with comparable companies that do not receive public support for investment in innovation.

OUTPUTS

Outputs	Unit of measure	Baseline	Baseline year	Target 2019	Means of verification	Comments
Component 2. Institutional framework for competitiveness						
New CNCF model approved	Model approved	0	2018	1	Supreme Decree 038-2019-EF	MEF
Specialized public-public and public-private coordination group set up in strategic sectors	Group set up	0	2018	1	Supreme Decree 008-2019-EF	MEF
Public-private coordination board set up in the forestry sector	Board set up	0	2017	1	Ministerial Resolution 347-2017-EF/10	MEF
Public-private coordination board set up in the aquaculture sector	Board set up	0	2017	1	Ministerial Resolution 319-2017-EF/10	MEF
Public-private coordination board set up in the mining-energy sector	Board set up	0	2018	1	Ministerial Resolution 326-2018-EF/10	MEF
EESI reactivated	Team reactivated	0	2018	1	Supreme Decree 019-2019-EF	MEF
Bank of EESI investment projects implemented	Bank implemented	0	2018	1	Directorial Resolution 02-2019-EF/10.08	MEF
Document approved identifying priority investment projects for EESI monitoring	Document approved	0	2018	1	Directorial Resolution 01-2019-EF/10.08	MEF
Component 3. Business environment for investment						
Proposed regulations published on forest and wildlife infractions and penalties	Proposed regulations published	0	2018	1	Ministerial Resolution 0190-2019-MINAGRI	EEME (MEF/Ministry of Agriculture)
Approved official list of forest species	List approval	0	2018	1	Directorial Resolution 118-2019-MINAGRI-SERFOR-DE	EEME (MEF/National Forest Service-SERFOR)

Outputs	Unit of measure	Baseline	Baseline year	Target 2019	Means of verification	Comments
Regional forest agency in two forest regions created	Agencies created	0	2018	2	Regional Ordinance 014-2018-GRL-CR and Regional Ordinance 003-2019-GRU	EEME (MEF/regional governments)
Approved health standard for live bivalve mollusks aligned with EU criteria	Standard approved	0	2017	1	Supreme Decree 004-2018-PRODUCE	EEME (MEF/Ministry of Production)
Authorized opening of the Australian market to shrimp	Authorization for the entry of shrimp	0	2018	1	Communiqué from the Australian Department of Agriculture and Water Resources	EEME (MEF/Ministry of Production)
Authorized opening of the People's Republic of China market to shrimp	Authorization for the entry of shrimp	0	2018	1	Agreement between the Chinese General Administration of Quality Supervision, Inspection, and Quarantine and PRODUCE	EEME (MEF/Ministry of Production)
Aquaculture labor inspection protocol	Protocol approved	0	2018	1	Superintendence Resolution 218-2019-SUNAFIL	EEME (National Office of the Superintendent of Labor Inspection)
Approved aquaculture and fisheries environmental management regulations	Regulations approved	0	2018	1	Supreme Decree 012-2019-PRODUCE	EEME (Ministry of Production)
Mine closure regulations approved	Regulations approved	0	2018	1	Supreme Decree 013-2019-EM	EEME (MEF/Ministry of Energy and Mines)
Crecer Fund regulated to implement guarantees, lines of credit, and investment for MSME growth	Fund regulated	0	2018	1	Supreme Decree 007-2019-EF	MEF
Business structure of "Sociedad por Acciones Cerrada Simplificada" approved	Structure approved	0	2018	1	Legislative Decree 1409	MEF
New administrative procedures resulting from the RQA for corporate procedures ratified	Procedure ratified	0	2017	4	Supreme Decree 110-2018-PCM, Supreme Decree 130-2018-PCM, Supreme Decree 046-2019-PCM and Supreme Decree 094-2019-PCM	PCM
Draft law published on the single body for free competition advocacy	Draft law published	0	2018	1	Ministerial Resolution 225-2019-PCM	INDECOPI
Guidelines for Combatting Collusion in Public Procurement approved	Guidelines approved	0	2018	1	Minutes 925 of the Free Competition Advocacy Commission	INDECOPI
Rewards program included in the framework of the free competition advocacy law	Program included	0	2018	1	Legislative Decree 1396	Executive branch (INDECOPI)

Outputs	Unit of measure	Baseline	Baseline year	Target 2019	Means of verification	Comments
Draft law on the prior control of mergers and acquisitions published	Draft law published	0	2018	1	Official Letter 073-2019-PE	Executive branch (MEF/INDECOPI)
Mobile metrology laboratories operational in regions	Number of laboratories operational	0	2018	2	INACAL report on the operation of metrology laboratories in La Libertad and San Martín	INACAL
Online system of sales of technical standards enabled	System enabled	0	2018	1	Resolution 144-2018 P.E.	INACAL
Peruvian technical standards included in public procurement technical documentation	Number of technical standards	0	2017	100	Report 032-2019-INACA/DN	INACAL
National infrastructure plan published	Plan published	0	2018	1	https://mef.gob.pe/contenidos/inv_privada/planes/PNIC_2-019.pdf	MEF
Provision approved promoting the compulsory and progressive adoption of digital information modeling tools throughout the project cycle in State-contracted public works	Provision approved	0	2017	1	Legislative Decree 1444	MEF
Unit in charge of BIM at invierte.pe designated	Unit in charge designated	0	2017	1	Supreme Decree 284-2018-EF	MEF
Component 4. Business environment for innovation						
Innovation Executive Board created	Board created	0	2018	1	Ministerial Resolution 449-2018-EF/10	MEF
Draft regulations of the amendments introduced by Law 30806 to the Framework Science, Technology, and Technological Innovation Law submitted	Draft submitted	0	2018	1	Official Letter 232-2019-CONCYTEC-SG	CONCYTEC
Decree approved assigning competencies to the Technology Institute for Production to manage the CITE network.	Decree approved	0	2018	1	Legislative Decree 1451	Executive branch (PRODUCE)
Draft law that extends validity of the tax benefit to expenditures for scientific research, technological development, and technological innovation (R&D+innovation) submitted	Draft law submitted	0	2018	1	Official Letter 114-2019-CONCYTEC-PE	CONCYTEC
Resolution published clarifying the use of the tax benefit for companies that have used sector tax benefits	Resolution published	0	2018	1	SUNAT report 0015-2019-SUNAT/7T0000.	SUNAT

Outputs	Unit of measure	Baseline	Baseline year	Target 2019	Means of verification	Comments
Resolution making the procedures to make indirect use of the R&D+innovation incentive (through R&D+innovation centers) more flexible.	Resolution published	0	2018	1	CONCYTEC Resolution P.E. 020-2019-CONCYTEC	CONCYTEC
Legislative framework established to promote careers in scientific research	Legislative framework established	0	2018	1	Law 30984	CONCYTEC
Document approved on guidelines for the use of <i>canon</i> resources	Document approved	0	2018	1	Resolution P.E. 214-2018	CONCYTEC
Competitive bidding process completed for proposals to support the demand for technological services	Competitive bidding completed	0	2018	1	Agreements 026/031/036/038/040/039/041/- INNOVATEPERU-ADT-2019	INNOVATE
Competitive bidding process implemented for proposals to finance a venture capital fund	Financing approved	0	2018	1	Virtual approval by FOMITEC Board of Directors	INNOVATE
Law enacted that establishes new intellectual property rights appropriate to the country's potential	Law enacted	0	2017	1	Legislative Decree 1397	Executive branch (INDECOPI)
Draft submitted of the Law on the Observance of Intellectual Property Rights	Draft law submitted	0	2018	1	Letter 336-2019-/PRE-INDECOPI	INDECOPI

DOCUMENT OF THE INTER-AMERICAN DEVELOPMENT BANK

PROPOSED RESOLUTION DE-___/19

Peru. Loan ____/OC-PE to the Republic of Peru
Program to Improve Productivity and Competitiveness

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 the Republic of Peru, as borrower, for the purpose of granting it a financing to cooperate in the execution of the Program to Improve Productivity and Competitiveness. Such financing will be for the amount of up to US\$50,000,000 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 ____ 20__)