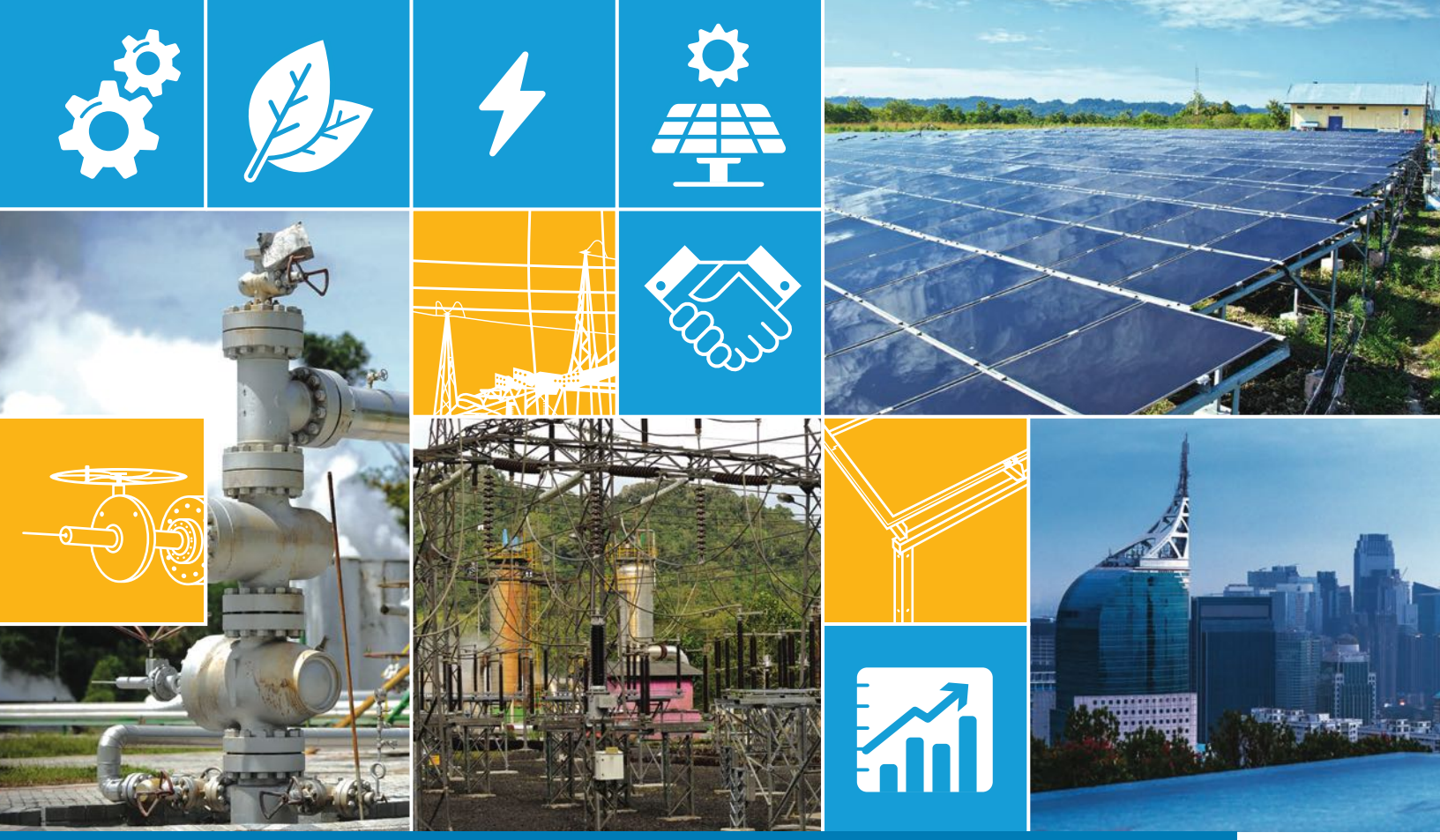

PUBLIC–PRIVATE PARTNERSHIP MONITOR

INDONESIA

DECEMBER 2020

ASIAN DEVELOPMENT BANK

ADB

PUBLIC–PRIVATE PARTNERSHIP MONITOR

INDONESIA

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ASIAN DEVELOPMENT BANK

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Notes:
In this publication, "$" refers to United States dollars.
ADB recognizes "China" as the People's Republic of China, "Korea" as the Republic of Korea, and "Vietnam" as Viet Nam.

On the cover:
Left side: Steam from deep within the Earth is used to generate electricity at the Lahendong geothermal power plant in Manado, Indonesia (photo by Ariel Javellana/ADB). *Center photo:* Renewable Energy Development Project in Indonesia: The Lahendong Geothermal Power Plant can produce 40 megawatts of electricity (photo by Ariel Javellana/ADB). *Right side from top to bottom:* The Sumba Iconic Island Initiative aims to provide 100% renewable energy to the inhabitants of Sumba island within 10 years. Scaling Up Renewable Energy Access in Eastern Indonesia (Sumba Iconic Island Initiative) (photo by Sean Crowley/ADB); View from a sky bar on the 56th floor at BCA Tower overlooking downtown Jakarta (photo by Gerhard Joren/ADB).

Cover design by Claudette Rodrigo.

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Foreword

We are pleased to present the *Public–Private Partnership Monitor*, a detailed review of the current state of public–private partnership (PPP) enabling environment in selected countries in Asia and the Pacific.

Availability of adequate infrastructure is a measure of a country's ability to sustain its economic growth. For economies across Asia and the Pacific, provision of basic infrastructure services, including water, health, energy, transportation, and communications, is an important public sector activity. As demand for infrastructure has increased faster than government budgets, the public sector has increasingly considered partnership with the private sector as an alternate modality for financing infrastructure.

The Asian Development Bank (ADB) estimates that Asia and the Pacific must spend $1.7 trillion a year on infrastructure until 2030 to maintain growth, meet social needs, and respond to the effects of climate change. That amount is expected to go up. The traditional sources of finance for infrastructure—the government's budgetary allocations—have not been enough to meet the demand. Prior to the coronavirus disease (COVID-19) pandemic, ADB estimated an annual infrastructure gap of $204 billion to be filled through private sector investment. That amount is also now expected to increase.

For the private sector, investment in infrastructure, whether through PPPs or otherwise, represents an investment avenue competing with various other investment options available. In order to compete, and to crowd in private capital into infrastructure, governments need to provide a conducive environment to adequately establish and protect the rights of the private sector, and the necessary support to ensure every asset brought to market provides returns that are commensurate with the risks.

The PPP Monitor provides the investor community with business intelligence on the enabling environment, policies, priority sectors, and deals to facilitate informed investment decisions. For ADB developing member countries (DMCs), the PPP Monitor serves as a diagnostic tool to identify gaps in their legal, regulatory, and institutional framework. ADB and other international development agencies can also benefit from the PPP Monitor as it could be useful in initiating dialogues to assess a country's readiness to tap PPPs as a means to develop and sustain its infrastructure.

Building on the success of the previous editions of the PPP Monitor, the new PPP Monitor is now being brought online to widen its reach. More countries will be continually added in the PPP Monitor and it is expected to become a primary knowledge base for assessing a country's PPP environment for the government and the business community. The PPP Monitor features an interactive online version which allows users to compare and contrast the key PPP parameters and features across the DMCs. The online version of the PPP Monitor may be accessed at http://www.pppmonitor.adb.org.

The PPP Monitor has been upgraded to provide a 'one-stop' information source, derived from a consolidation of (i) the previous PPP Monitor; (ii) leading PPP databases of multilateral development banks like the World Bank and the IFC and organizations like EIU (Infrascope), and GI Hub (InfraCompass); (iii) reports of a country's PPP unit; (iv) a country's legal framework; and (v) consultations with leading technical experts and legal firms as well as financial institutions.

The PPP Monitor includes more than 500 qualitative and quantitative indicators to profile the national PPP environment, the sector-specific PPP landscape (for eight identified infrastructure sectors), and the PPP landscape for local government projects. The COVID-19 pandemic has pushed social infrastructure into the forefront of policy and planning; hence, where possible, this PPP Monitor takes a bigger focus on social and municipal aspects like health, education, and affordable housing.

The PPP market in most of ADB DMCs is still at an emerging/developing stage, and continuous regulatory reforms and institutional strengthening are required to facilitate further private sector investment in infrastructure and to create a sustainable pipeline of bankable projects. Through the PPP Monitor, ADB continues to provide support for DMCs in addressing various infrastructure and PPP-related challenges, in developing sustainable infrastructure projects, and in delivering efficient and effective public services through PPPs. ADB also helps DMCs improve their investment climates, formulate sound market regulations, and build robust legal and institutional frameworks to encourage private sector participation in infrastructure through PPPs.

We hope that this PPP Monitor will pave the way for continued dialogue between the public and private sectors and stimulate the adoption of PPPs in the Asia and Pacific region.

Yoji Morishita
Head, Office of Public–Private Partnerships
Asian Development Bank

Acknowledgments

The *Public–Private Partnership Monitor: Country Profile—Indonesia* was prepared by the Asian Development Bank (ADB) Office of Public–Private Partnership (OPPP), in close coordination with the Indonesia Resident Mission.

This effort has been led by Sanjay Grover, public–private partnership (PPP) specialist in the PPP Thematic Group Secretariat, who developed, refined, and streamlined the analytical framework for capturing the national, subnational, and sectoral PPP-related landscape that has been utilized in this document.

Yoji Morishita, head of OPPP, and Srinivas Sampath, chief of the PPP Thematic Group, have provided helpful guidance and unfailing support during the development of this PPP Monitor.

The PPP Monitor uses data published by the governments of ADB developing member countries—on their official websites and in reports, publications, laws, and regulations—as well as data published by other multilateral development agencies and included in industry publications and databases such as those of the World Bank, Organisation for Economic Co-operation and Development (OECD), World Economic Forum, International Monetary Fund (IMF), Inframation Group, IJGlobal, Economist Intelligence Unit (Infrascope Index), Global Infrastructure Hub, TheGlobalEconomy.com, Bloomberg, S&P Global, Trading Economics and PPP Knowledge Lab.

ADB has partnered with the CRISIL Infrastructure Advisory and Panapps Inc. The CRISIL Infrastructure Advisory shared its expertise and provided inputs in developing the PPP Monitor for Indonesia while the Panapps Inc. has published this report online.

Ricardo McKlmon, Jezreel Pabia Uy, and Carmelia Godoy have very capably led the management and coordination with the numerous contributors to this report. The contributions and review by Kin Wai Chan, Aura Vicencio Abon, and Shota Yamanaka from OPPP, and by the Indonesia Resident Mission, led by Amr Qari, were instrumental in the quality control of this document.

Several others provided help and support—Joanne Gerber edited the report, Asiatype Inc. and Levi Rodolfo Lusterio performed typesetting and proofreading respectively, and Claudette Rodrigo designed the cover. April-Marie Gallega and Ayun Sundari of Knowledge Support Division of ADB Department of Communications provided guidance and assistance in the publication process.

Definition of Terms

Term	Definition
Public–private partnership (PPP)	Contractual arrangement between public (national, state, provincial, or local) and private entities through which the skills, assets, and/or financial resources of each of the public and private sectors are allocated in a complementary manner, thereby sharing the risks and rewards, to seek to provide optimal service delivery and good value to citizens. In a PPP, the public sector retains the ultimate responsibility for service delivery, although the private sector provides the service for an extended time. Within Asian Development Bank operations, all contracts such as performance-based contracts (management and service contracts), lease–operate–transfer, build–own–operate–transfer, design–build–finance–operate, variants, and concessions are considered as various forms of PPP. Excluded are • contracts involving turnkey design and construction as part of public procurement (engineering, procurement, and construction contracts); • simple service contracts that are not linked to performance standards (those that are more aligned with outsourcing to private contractor staff to operate public assets); • construction contracts with extended warranties and/or maintenance provisions of, for example, up to 5 years post completion (wherein performance risk-sharing is minimal as the assets are new and need only basic maintenance); and • all privatization and divestures.
Affermage or lease contracts	Under a lease contract, the private sector developer is responsible for the service in its entirety and undertakes obligations relating to quality and service standards. Except for new and replacement investments, which remain the responsibility of the government contracting agency, the operator provides the service at his expense and risk. The duration of the leasing contract is typically 10 years and may be renewed up to 20 years. Responsibility for service provision is transferred from the public sector to the private sector and the financial risk for operation and maintenance is borne entirely by the private sector operator. In particular, the operator is responsible for losses and for unpaid consumers' debts. Leases do not involve any sale of assets to the private sector.
Availability-/ performance-based payments	Method of investment recovery in PPP projects, when payments to the private party are made by the government contracting agency over the lifetime of a PPP contract in return for making infrastructure or services available for use at acceptable and contractually agreed performance standards.
Best and final offer (BAFO)	An incentive mechanism provided by the government contracting agency to the private sector developer initiating a PPP project through the unsolicited proposal route (USP proponent) to be automatically shortlisted for the final bidding round and provide its best and final offer to match the other bidders' best offer.
Build–lease–transfer	A PPP type whereby a private sector developer is authorized to finance and construct an infrastructure or development facility, and upon its completion hands it over to the government contracting agency on a lease arrangement for a fixed period after which ownership of the facility is automatically transferred to the government contracting agency.

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Term	Definition
Build–own–operate	A PPP type whereby a private sector developer is authorized to finance, construct, own, operate, and maintain an infrastructure or development facility from which the private sector developer is allowed to recover its total investment, operating and maintenance costs plus a reasonable return thereon by collecting tolls, fees, rentals or other charges from facility users. Under this PPP type, the private sector developer which owns the assets of the facility may assign its operation and maintenance to a facility operator.
Build–operate–transfer	Build–operate–transfer (BOT) and similar arrangements are a specialized concession in which a private firm or consortium finances and develops a new infrastructure project or a major component according to performance standards set by the government. Under BOTs, the private sector developer provides the capital required to build a new facility. Importantly, the private operator now owns the assets for a period set by contract—sufficient to give the developer time to recover investment costs through user charges.
Build–transfer	A PPP type under which the private sector developer undertakes the financing and construction of a given infrastructure or development facility, and after its completion hands it over to the government contracting agency, which pays the private sector developer on an agreed schedule its total investments expended on the project, plus a reasonable rate of return thereon. This arrangement may be employed in the construction of any infrastructure or development project, including critical facilities which, for security or strategic reasons, must be operated directly by the government contracting agency.
Commercial close	Indicates the signing of the PPP contract between the government contract agency and the identified private sector developer. Usually occurs after the terms and conditions of the draft PPP contract are negotiated and agreed between the government contracting agency and the identified private sector developer.
Competitive bidding	A process under which the bidders submit information detailing their qualifications and detailed technical and financial proposals, which are evaluated according to defined criteria—often in a multi-stage process—to select a preferred bidder. Competitive bidding may also include competitive negotiations and license schemes.
Concession	A PPP type which makes the concessionaire (established by the selected private sector developer) responsible for the full delivery of services in a specified area, including operation, maintenance, collection, management, and construction and rehabilitation of the system. Importantly, the private sector developer is responsible for all capital investment. Although the concessionaire is responsible for providing the assets, such assets are publicly owned even during the concession period. The public sector is responsible for establishing performance standards and ensuring that the concessionaire meets them. In essence, the public sector's role shifts from being the service provider to regulating the price and quality of service.
Currency conversion swap fee	A premium which is paid by the borrower to settle on a swap in which the parties sell currencies to each other subject to an agreement to repurchase the same currency in the same amount, at the same exchange rate, and on a fixed date in the future.
Direct agreement	An agreement normally made between the concessionaire (established by the private sector developer), the government contracting agency, and the lenders. The agreement usually gives the lenders step-in rights to take over the operation of the key PPP contracts.
Direct negotiations	A type of PPP procurement under which the PPP contract is awarded on the basis of a direct agreement with a private sector developer without going through the competitive bidding process.
Dispute resolution	A process to resolve any dispute between the government contracting agency and the private sector developer as agreed in the PPP contract. The possible dispute resolution mechanisms in a PPP contract could include resolution through • discussion between both parties, • dispute resolution board, • expert determination, • mediation or conciliation, or • arbitration.

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Term	Definition
Environmental impact assessment	A process of evaluating the likely environmental impacts of a proposed project or development, taking into account interrelated socioeconomic, cultural, and human health impacts, both beneficial and adverse.
Feed-in tariff (FIT)	A policy mechanism designed to accelerate investment in renewable energy technologies by offering long-term purchase agreements for the sale of renewable energy electricity.
Financial close	An event whereby (i) a legally binding commitment of equity holders and/or debt financiers exists to provide or mobilize funding for the full cost of the project, and (ii) the conditions for funding have been met and the first tranche of funding is mobilized. If this information is not available, construction start date is used as an estimated financial closure date.
Financial equilibrium	A mechanism in a PPP agreement for dealing with changes, when changes in specified conditions and circumstances trigger compensating changes to the terms of the agreement. Some civil law jurisdictions emphasize economic or financial equilibrium provisions that entitle a partner to changes in the key financial terms of the contract to compensate for certain types of exogenous events that may otherwise impact returns. The partner is protected as the economic balance of the contract must be maintained and adequate compensation paid for damages suffered. Unexpected changes that merit financial equilibrium may arise from force majeure (major natural disasters or civil disturbances), government action, and unforeseen changes in economic conditions.
Force majeure	An event that is reasonably beyond the reasonable control of the affected party as a result of which such party's performance of its obligations under the PPP contract is prevented or rendered impossible. Force majeure events may include • war, civil war, armed conflict or terrorism; • nuclear, chemical, or biological contamination unless the source or the cause of the contamination is the result of the actions of or breach by the concessionaire or its subcontractors; • pressure waves caused by devices travelling at supersonic speeds, which directly causes either party (the "Affected Party") to be unable to comply with all or a material part of its obligations under the contract; or • any other similar events that are beyond reasonable control of the affected party, and prevent or render impossible the performance by such party of its obligations under the PPP contract.
Government contracting agency	The ministry, department, or agency that enters into a PPP contract with the private sector and is responsible for ensuring that the relevant public assets or services are provided.
Government guarantee	Agreements under which the government agrees to bear some or all risks of a PPP project. It is a secondary obligation which legally binds the government to take on an obligation if a specified event occurs. A government guarantee constitutes a contingent liability, for which there is uncertainty as to whether the government may be required to make payments, and if so, how much and when it will be required to pay. In practice, government guarantees are used when debt providers are unwilling to lend to a private party in a PPP because of concerns over credit risk and potential loan losses. Government guarantees can also be used to benefit equity investors in a PPP company when they require protection against the investment risks they bear.
Government pay (Offtake)	Represents the payment made by the government contracting agency to the concessionaire (established by the private sector developer) for the infrastructure assets provided and services delivered through a PPP project. These payments could be • usage-based—for example, shadow tolls or output-based subsidies; • based on availability—that is, conditional on the availability of an asset or service to the specified quality; and • upfront subsidies based on achieving certain agreed milestones.

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Term	Definition
Gross-cost contract	A type of PPP contract arrangement in the railway sector under which all revenues (from fares and other sources) are transferred to the government contracting agency, and the risks absorbed by the developer are confined to those associated with the cost of operations.
Hybrid arrangement	A method of investment recovery in PPP projects when payments to the private party are made as a combination of user charges and availability payments over the lifetime of a PPP contract, in return for making infrastructure or services available for use at acceptable and contractually agreed performance standards.
Independent power producer (IPP) scheme	A scheme whereby a producer of electrical energy, which is not a public utility, makes electric energy available for sale to utilities or the general public. A scheme whereby a producer of electrical energy, which is a private entity, owns and/or operates facilities to generate electricity and then sells it to a utility, central government buyer, or end users. The IPP invests in generation technologies and recovers their cost from the sale of the electricity.
Institutional arbitration	An arbitration process in which a specialized institution intervenes and takes on the role of administering the arbitration process between the government contracting agency and the private sector developer for a PPP project-related dispute. This institution would have its own set of rules which would provide a framework for the arbitration, and its own form of administration to assist in the process.
Interest rate swap fee	A premium paid by the borrower for a hedging contract to convert a floating interest rate into a fixed rate. The two parties agree to exchange interest rate payments based on a notional principal amount, with typically one paying a fixed rate and the other generally paying a floating rate.
Joint venture	An alternative to full privatization in which the infrastructure is co-owned and operated by the public sector and private operators. Under a joint venture, the public and private sector partners can either form a new company or assume joint ownership of an existing company through a sale of shares to one or several private investors. The company may also be listed on the stock exchange.
Lender's step-in rights	Lender's rights in project-financed arrangements to "step in" to the project company's position in the contract to take control of the infrastructure project where the project company is not performing.
Management contract	A PPP type which expands the services to be contracted out to include some or all of the management and operation of the public service (i.e., utility, hospital, port authority). Although ultimate obligation for service provision remains in the public sector, daily management control and authority is assigned to the private partner or contractor. In most cases, the private partner provides working capital but no financing for investment.
Material adverse government action	An action by the government which directly and materially affects the private party of a PPP project in performing its obligations under the relevant PPP contract, and which would reasonably be expected to result in a material adverse effect.
Net-cost contract	A type of PPP contract arrangement in the railway sector under which all revenues (from fares and other sources) are retained by the developer, and traffic and revenue risks are absorbed either fully or as per a contractually agreed portion.
Nominal interest rate	The nominal interest rate is the interest rate applicable to a borrowing before taking inflation adjustment into account. In certain cases, nominal interest rate also refers to the advertised or stated interest rate on a borrowing, without taking into account any fees or compounding of interest. Nominal interest rate = Real interest rate + Inflation rate
Nonrecourse/ limited recourse project financing	The financing of the development or exploitation of a right, natural resource, or other assets where the bulk of the financing is to be provided by way of debt, and is to be repaid principally out of the assets being financed and their revenues.

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Term	Definition
Output-based aid (OBA)	Refers to development aid strategies that link the delivery of public services in developing countries to targeted performance-related subsidies. OBA provides a way in which international financial institutions can directly structure their financing to benefit poor people, even when the service provider is a private company. OBA is the use of explicit, performance-based subsidies funded by the donor agencies to complement or replace user fees. It involves the contracting out of basic service provision to a third party—such as private companies, nongovernment organizations, community-based organizations, and even public service providers—with subsidy payment tied to the delivery of specified outputs. This means that targeted and valuable subsidies to disadvantaged populations are funded through donor funds. The private partner, meanwhile, can only recover this funding by achieving specific performance outcomes.
Project bond financing	An alternative source of financing infrastructure project by placing bonds.
Project development	Indicates the stage of the PPP project life cycle including PPP project identification, preparation, structuring, and procurement up to commercial close between the government contracting agency and the private sector developer.
Project development fund (PDF)	A fund dedicated to reimbursing the cost of feasibility studies, transaction advisers, and other costs of project development, to encourage contracting agencies to use high-quality transaction advisers and best practice. PDFs provide the specialized resources needed to conduct studies, to design and structure a PPP, and then to procure the PPP.
Real interest rate	The real interest rate is the interest rate applicable to a borrowing that takes inflation rate into account. Real interest rate = Nominal interest rate – Inflation rate
Regulatory framework	A framework encompassing all laws, regulations, policies, binding guidelines or instructions, other legal texts of general application, judicial decisions, and administrative rulings governing or setting precedent in connection with PPPs. In this context, the term "policies" refers to other government-issued documents, which are binding on all stakeholders, are enforced in a manner similar to laws and regulations, and provide detailed instructions for the implementation of PPPs.
Rehabilitate–operate–transfer	A PPP type whereby an existing facility is handed over to the private sector developer to refurbish, operate and maintain for a franchise period, at the expiry of which the legal title to the facility is turned over to the government contracting agency.
Risk allocation matrix	Matrix indicating the allocation of the consequences of each risk to one of the parties in the PPP contract, or agreeing to deal with the risk through a specified mechanism which may involve sharing the risk.
Service contract	A PPP type under which the government contracting agency hires a private company or entity to carry out one or more specified tasks or services for a period, typically 1–3 years. The government contracting agency remains the primary provider of the infrastructure service and contracts out only portions of its operation to the private partner. The private partner must perform the service at the agreed cost and must typically meet performance standards set by the government contracting agency. Government contracting agencies generally use competitive bidding procedures to award service contracts, which tend to work well given the limited period and narrowly defined nature of these contracts.
Social impact assessment	Includes the processes of analysing, monitoring, and managing the intended and unintended social consequences—both positive and negative—of planned interventions (policies, programs, plans, projects) and any social change processes invoked by those interventions. Its primary purpose is to bring about a more sustainable and equitable biophysical and human environment.
Social infrastructure	Covers social services, including hospitals, schools and universities, prisons, housing, and courts.

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Term	Definition
State-owned enterprise (SOE)	A company or enterprise owned by the government or in which the government has a controlling stake.
Swiss challenge	A process in public procurement when a government contracting agency that has received an unsolicited bid for a project publishes details of the bid and invites third parties to match or exceed it.
Tax holiday	A government incentive program that offers tax reduction or elimination to projects and/ or businesses. In the context of a PPP project, tax holidays are provided to exempt the concessionaire from making any tax payments during the initial demand ramp up period to make the project financially viable.
Unsolicited bid	A proposal made by a private party to undertake a PPP project. It is submitted at the initiative of the private party, rather than in response to a request from the government contracting agency.
User charges	A method of investment recovery in PPP projects when payments to the private party are fully derived from tariffs paid by users or off-takers over the lifetime of a PPP contract, in return for making infrastructure or services available for use at acceptable and contractually agreed performance standards.
Viability gap fund	A scheme wherein the projects with low financial viability are given grants (or other financial support from the government) up to a stipulated percentage of the project cost, making them financially viable as PPPs.

Abbreviations

ADB	–	Asian Development Bank
AIIB	–	Asian Infrastructure Investment Bank
APBD	–	Anggaran Pendapatan Belanja Daerah (Regional Revenue and Expenditure Budget)
APBN	–	Anggaran Pendapatan Belanja Negara (State Revenue and Expenditure Budget)
APEC	–	Asia-Pacific Economic Cooperation
ASEAN	–	Association of Southeast Asian Nations
BAKTI	–	Badan Aksebilitas Telekomunikasi dan Informasi (Telecommunications and Information Accessibility Body)
BAPPENAS	–	Badan Perencanaan dan Pembangunan Nasional (National Development Planning Agency)
BUJT	–	Badan Usaha Jalan Tol (Toll Road Business Enterprise)
BLUD	–	Badan Layanan Umum Daerah (local public service agency)
BOO	–	build–operate–own
BOOT	–	build–operate–own–transfer
BOT	–	build–operate–transfer
BPJT	–	Indonesia Toll Road Authority
BROT	–	build–rehabilitate–operate–transfer
BRTI	–	Badan Regulasi Telekomunikasi Indonesia (Indonesian Telecommunications Regulatory Body)
BSSN	–	Badan Siber dan Sandi Negara (National Cyber and Encryption Agency)
BUJT	–	Badan Usaha Jalan Tol (Toll Road Business Enterprise)
CAI	–	Changi Airports International
DGCA	–	Directorate General of Civil Aviation
DKI	–	Daerah Khusus Ibukota (Special Capital Region)
DINFRA	–	Dana Investasi Infrastruktur
DJPK	–	Direktorat Jenderal Perimbangan Keuangan (Directorate General of Fiscal Balance)
FIRR	–	financial internal rate of return
GCA	–	government contracting agency

GW	–	gigawatt
HGB	–	Right to Build
HGU	–	Right to Cultivate
HMSRS	–	Right of Ownership over Stacked Units
ICT	–	information and communication technology
IFF	–	Infrastructure Finance Facility
IIGF	–	Indonesia Infrastructure Guarantee Fund
IPP	–	independent power producer
IRR	–	internal rate of return
km	–	kilometer
KPBU	–	Kerjasama Pemerintah dan Badan Usaha (cooperation between the government and business entities in infrastructure provision)
KPPIP	–	Komite Percepatan Penyediaan Infrastruktur Prioritas (Committee for Acceleration of Priority Infrastructure Delivery)
KPPU	–	Komisi Pengawas Persaingan Usaha (Commission for the Supervision of Business Competition)
KSP	–	Kerja Sama Pemanfaatan (Utilization Cooperation)
KSPI	–	Kerja Sama Penyediaan Infrastruktur (Infrastructure Procurement Cooperation)
LKPP	–	Lembaga Kebijakan Pengadaan Barang/Jasa Pemerintah (National Public Procurement Agency)
LMAN	–	Lembaga Manajemen Aset Negara (State Asset Management Agency)
LRT	–	light rail transport
Mbps	–	megabits per second
MCI	–	Ministry of Communication and Informatics
MCIT	–	Ministry of Communication and Information Technology
MGL	–	maximum guarantee limit
MEMR	–	Ministry of Energy and Mineral Resources
MOF	–	Ministry of Finance
MOH	–	Ministry of Health
MOHA	–	Ministry of Home Affairs
MOT	–	Ministry of Transportation
MPWH	–	Ministry of Public Works and Housing
OECD	–	Organisation for Economic Co-operation and Development
OJK	–	Otoritas Jasa Keuangan (Financial Services Authority)
PAD	–	Pendapatan Asli Daerah (Original Regional Revenue)

PDAB	–	Perusahaan Daerah Air Bersih (provincial public water company)
PDAM	–	Perusahaan Daerah Air Minum (district or municipal public water company)
PDF	–	project development facility
PEFA	–	Public Expenditure and Financial Accountability
PFMS	–	Public Financial Management System
PINA	–	Pembiayaan Investasi Non-Anggaran Pemerintah (Non-Government Budget Equity Financing)
PLN	–	Perusahaan Listrik Negara
PPA	–	power purchase agreement
PPP	–	public–private partnership
PPP JO	–	Public–Private Partnership Joint Office
PT	–	Perseroan Terbatas (limited liability company)
PT IIF	–	PT Indonesia Infrastructure Finance
PT SMI	–	PT Sarana Multi Infrastruktur (Persero) (Indonesia State-Owned Infrastructure Financing Company)
RFP	–	request for proposal
RFQ	–	request for qualification
RIDF	–	Regional Infrastructure Development Fund
ROT	–	rehabilitate–operate–transfer
Rp	–	Indonesian rupiah
RPJMN	–	Rencana Pembangunan Jangka Menengah Nasional (National Medium-Term Development Plan)
RPJPN	–	Rencana Pembangunan Jangka Panjang Nasional (National Long-Term Development Plan)
RUPTL	–	Electricity Supply Business Plan
SBSN	–	Surat Berharga Syariah Negara (State Shari'a Securities)
SN-PPPK	–	Strategi Nasional Pengembangan dan Pendalaman Pasar Keuangan (National Financial Market Development and Deepening Strategy)
SOE	–	state-owned enterprise
SPC	–	special purpose company
SPV	–	special purpose vehicle
THC	–	terminal handling charge
VFM	–	value for money
VGF	–	viability gap fund

Guide to Understanding the Public–Private Partnership Monitor

The *Public–Private Partnership Monitor* (PPP Monitor), a flagship publication of the Asian Development Bank (ADB), profiles the current state of the PPP enabling environment in ADB's developing member countries (DMCs) in Asia and the Pacific. The PPP Monitor features, for the first time, a data-driven, interactive online version which allows users to compare and contrast the key PPP parameters and features across the featured DMCs. While the featured countries are a small sample, more countries will be continually added in the PPP Monitor, which is expected to become a knowledge base for assessing a country's PPP environment for the government and the business community. The new PPP Monitor builds on the success of the first and second editions of the PPP Monitor.

The PPP Monitor provides a snapshot of the overall PPP landscape in the country. This downloadable guide also assesses more than 500 qualitative and quantitative indicators that have been structured per topic—the national PPP landscape, the sector-specific PPP landscape (for eight identified infrastructure sectors and a separate section for other sectors), and the PPP landscape for local government projects. The PPP Monitor also captures the critical macroeconomic and infrastructure sector indicators (including the *Ease of Doing Business* scores) from globally accepted sources.

Each of the topics and associated subtopics presented below are characterized by qualitative and quantitative indicators. Qualitative indicators take the form of a question to which "Yes," "No," "Not Applicable," or "Unavailable" answers can be given. Quantitative indicators are represented in the form of numbers, ratios, investment value, and duration.

For each of the developing member countries covered, the information and data are organized along the following topic clusters:

Overview

Topic	Subtopics
Overview	• Overview of the PPP legal and regulatory framework • Number of PPP projects reaching financial close from 1990 till end of 2019 across sectors • Total investment made in PPPs from 1990 to 2019 across sectors • Features of past PPP projects including the number of PPPs procured through various modes • Number of PPP projects under preparation and procurement • Number of PPP projects supported by government • Payment mechanism for PPPs • Foreign sponsor participation in PPPs from 1990 to 2019 • Major sponsors active in the infrastructure sector in the country • Challenges associated with the PPP landscape in the country

National Public–Private Partnership Landscape Indicators

To profile the national PPP landscape, the indicators are grouped into three major categories: national PPP enabling framework, government support for PPP projects, and maturity of the PPP market.

Topic	Subtopics
National PPP legal and regulatory framework	Details on the legal and regulatory framework applicable to PPPs and its evolution since the introduction of PPPs in the country Details on the other supporting laws and regulations governing PPPs in the country
PPP types	Details on the PPP types allowed to be used as per PPP legal and regulatory framework. In case the PPP legal and regulatory framework doesn't specify the PPP types, this section provides the details on the specific PPP types which have been adopted for various PPP projects at various stages of the PPP life cycle.
Eligible sectors	Details on various infrastructure sectors for which projects could be procured through the PPP route as per the PPP legal and regulatory framework
Public-private partnership institutional framework	Details on the PPP institutional framework including the availability of a PPP Unit, the functions of the PPP Unit, the principal public entities associated with PPPs and their respective functions, and the details of the public entities responsible for PPP project identification, appraisal, approval, oversight, and monitoring
Entities responsible for PPP project identification, approval, and oversight	
Entities responsible for PPP project monitoring	
The public-private partnership process	Details on the various stages of the PPP process including PPP project identification, preparation, structuring, procurement, and management as per the PPP legal and regulatory framework in the country
PPP standard operating procedures, tool kits, templates, and model bid documents	Details on the standard operating procedures, and standard templates or model bidding documents available for PPPs (if any) Details on the key clauses in a PPP Agreement based on the review of select PPP Agreements already executed, and/ or the review of the PPP legal and regulatory framework
Lender's security rights	Rights of lenders including the charge of project assets
Termination and compensation	Definition on whether the private player is eligible for compensation in case of PPP project termination due to various reasons
Unsolicited PPP proposals	Details on possibility of submission of unsolicited PPP proposals, and their treatment, including potential advantages provided to the unsolicited PPP proposal proponent at the PPP procurement stage
Foreign investor participation restrictions	Definition on whether there are any statutory restrictions on foreign equity investments and ownership in PPP projects
Dispute resolution	Definition of the dispute resolution process and the mechanisms available in the country
Environmental and social issues	Details on whether the legal and regulatory framework governing PPPs stipulates a mechanism for managing the environmental and social impact of a PPP project, including the potential environmental and social issues which could be caused by a PPP project

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Topic	Subtopics
Land rights	Definition of the various mechanisms through which landownership and/or land use rights could be provided to the private partner in respect of the project site for a PPP project Details on land records and registration which could be provided to the private partner
Government financial support for PPP projects	Details on the various mechanisms of government financial support available to make PPP projects financially viable Salient features of government financial support mechanisms available
Project development funding support	Details on the various sources through which funding could be availed for the development activities (preparation, structuring, and procurement) of a PPP project Details on stages of the PPP project development during which such funding could be availed and utilized, including payments to transaction advisors
PPP project statistics	Details on the key PPP statistics in the country such as the availability of (i) a PPP database showing distribution of PPP projects across sectors and across various stages of the PPP life cycle, and (ii) a national PPP project pipeline and its alignment with the National Infrastructure Plan for the country
Sources of PPP financing	Details on the sources of financing for PPP projects in the country Details on typical key financing terms for various sources of financing, banks active in project finance for the last 24 months, active PPP project sponsors in the country for the last 24 months, availability of derivatives market, and availability of credit rating agencies in the country

Sector-Specific Public–Private Partnership Landscape Indicators

To profile the sector-specific PPP landscape, the indicators are grouped into five major categories: (i) sector-specific PPP contracting agencies, (ii) sector laws and regulations, (iii) sector master plan (including sector-specific PPP pipeline), (iv) features of the past PPP projects in the sector, and (v) sector-specific challenges for PPPs. The sectors which do not appear consistently across the featured countries are covered under the 'Other Sectors' category in the sector-specific PPP landscape.

Topic	Subtopics
Contracting agencies in the sector	Details on which government agencies could act as the contracting agencies for a PPP project
Sector laws and regulations	Details on the applicable sector laws and regulations for PPP projects, including the sector regulators and their respective functions.
Foreign investment restrictions in the sector	Details on the maximum allowed foreign equity investment in greenfield PPP projects in the sector
Standard contracts in the sector	Specification on whether standard contracts are available for PPP projects in the sector

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Topic	Subtopics
Sector master plan	Details on the master plan and/or road map adopted for infrastructure development in the sector by the national government and the corresponding line ministry Details on the pipeline of PPP projects for the sector aligned with this sector master plan and/or road map Details on the PPP projects under preparation and procurement in the sector
Features of past PPP projects	Features of the past PPP projects based on supporting indicators in terms of the number and value (where applicable) of PPP projects for each supporting indicator
Tariffs applicable to the sector	Details on the indicative tariffs applicable in the sector based on the examples of select PPP or other projects operational in the sector
Typical risk allocation for PPP projects in the sector	Details on the typical risk allocation between the government contracting agency and the private partner based on examples of select PPP projects which have achieved commercial close
Financing details for PPP projects in the sector	Typical financing details based on past PPP projects on the lines of the supporting indicators
Challenges associated with PPPs in the sector	Details on the PPP-related and sector-specific challenges faced by PPP projects in the sector
Typical sector-specific infrastructure indicators for the country	Details on select sector-specific infrastructure indicators for the country

Local Government Public–Private Partnership Landscape

To profile the PPP landscape for local government projects, the indicators are grouped into seven major categories: (i) local governance system, (ii) infrastructure development plans for local governments, (iii) sectors in which local governments can implement PPPs, (iv) revenue sources for local governments, (v) borrowings by local governments, (vi) budgetary allocation to local governments, and (vii) credit rating of local governments.

Topic	Subtopics
Key indicators related to local governments in the country	Details on the local governments using select key indicators on (i) the number and levels of local governments, (ii) the typical expenditure profile and heads, (iii) the typical revenue profile and heads, (iv) the typical debt profile and heads, and (v) grants and transfers from the higher levels of government
Local governance system	Details on the local governance system in the country, including the various levels of local governments; their roles, responsibilities, and functions; and the devolution of powers from the higher levels of government to the various levels of local governments
Infrastructure development plan for local governments	Details on the infrastructure development plans prepared by the local governments based on their capital investment projects in the pipeline, and the coverage of such infrastructure development plans

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Topic	Subtopics
PPP enabling framework for local governments	Details on the PPP enabling framework applicable to local government PPP projects, including PPP legal and regulatory framework, PPP policy framework, and PPP institutional framework
Eligible sectors for PPPs for local governments	Details on the eligible sectors in which PPPs could be undertaken by the local government as government contracting agency
Revenues for local governments	Details on the typical sources of revenue for local governments
Borrowings by local governments	Details on the typical sources of debt financing available for local governments, the purpose for which borrowed funds could be used, the terms of such borrowings, and the borrowing exposure of select local governments
Budgetary allocation to local governments	Details on the budgetary allocations and transfers to the local governments from the higher levels of government
Credit rating of local governments	Details on the precedence of local governments being rated by credit rating agencies in the country, and the details of credit ratings obtained by select local governments in the past
Case study on a local government PPP	A case of a PPP project undertaken by a local government in the past covering details on project background, project assets, PPP structure for the project, risk allocation among the parties for the project, project finance and project revenue details, and key learnings from the PPP project

Critical Macroeconomic and Infrastructure Sector Indicators

This section captures the critical macroeconomic and infrastructure sector indicators (including the *Ease of Doing Business* scores) from globally accepted sources.

Topic	Subtopics
Critical macroeconomic and infrastructure sector indicators	Details of the select key macroeconomic and infrastructure indicators for the country
Ease of Doing Business	Details on the various *Ease of Doing Business* parameters for the country based on the World Bank's *Ease of Doing Business* publication

Time Periods

The research was carried out in 2020 with the aim of reflecting the status as of the end of 2019. Therefore, some indicator data may have changed between the said period and the publication date of this report.

In country-level and sector-level sections, quantitative data in relation to the number of projects reflect the cumulative number of projects over the periods 1990–2017, 1990–2018, and 1990–2019. Otherwise, the data represent the status at each individual year.

Currency Equivalents

(As on 31 December 2019)

Currency unit – Indonesian rupiah (Rp)

Rp1.00 = $0.000072
$1.00 = Rp13,886.96

I. Overview

The Government of Indonesia has been showing a strong commitment to accelerating private sector participation in infrastructure development and investment. Given the massive infrastructure needs associated with economic growth, it is believed that relying solely on the government budget for infrastructure funding may not achieve the desired results.

The government's National Medium-Term Development Plan (RPJMN), 2015–2019 estimated that the total investment needed for infrastructure development during those years reached Rp4,796.2 trillion (around $345.4 billion), and is expected to grow to Rp5,957.7 trillion ($429 billion) during 2020–2024. The government expects that around 59% of the investment value will be provided by state-owned enterprises (SOEs) and the private sector. However, private sector involvement in infrastructure investment from 2015 to 2018 was still lower than the target, reaching only 21%. Given the funding limitations, private sector participation through a public–private partnership (PPP) scheme will be pivotal for the provision of infrastructure in Indonesia.

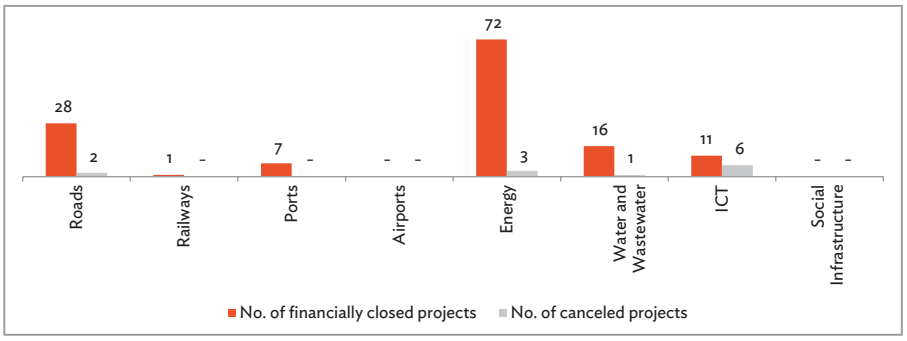
The development of PPPs in Indonesia started in early 1990s, when the initial set of projects with private sector participation in the toll road and energy sectors were implemented. After the introduction of PPPs as a formal mode for funding infrastructure development, in 2005, the government has made continuous efforts to institutionalize and promote PPP arrangements by enhancing the PPP regulatory framework. Indonesia now has in place several PPP-facilitating mechanisms and government-support mechanisms, such as the project development facility (PDF), guarantee facility, viability gap fund (VGF), availability payment mechanism, and a land acquisition financing mechanism. In addition, there are companies that play an active role in facilitating PPPs in the country, such as PT Infrastructure Finance Facility (PT IFF), a private nonbanking finance corporation; Indonesia Infrastructure Guarantee Fund (IIGF), or PT Penjaminan Infrastruktur Indonesia, a state-owned enterprise (SOE) under the Ministry of Finance (MOF) that is responsible for providing government guarantees for infrastructure projects developed under the PPP scheme; and the PT Sarana Multi Infrastruktur (PT SMI),[1] an SOE that provides long-term financing and advisory services for infrastructure development in Indonesia. From an institutional perspective, PPPs in Indonesia have been driven by the Ministry of National Development Planning/National Development Planning Agency (BAPPENAS); the PPP Unit, under Ministry of Finance; and the PPP Joint Office.

In terms of the number of infrastructure projects that have attracted private investments, based on the World Bank PPI Database, from 1990 to 2019, 135 PPP projects across various sectors—such as electricity, information and communication technology (ICT), ports, roads, and water—achieved financial closure. However, of these, 12 projects worth a total of $4.64 billion (approximately Rp64 trillion) were canceled.

The total investment made in the 135 PPP projects was approximately $63.5 billion (approximately Rp881.3 trillion). Figure 1 indicates the number of PPP projects that achieved financial closure and of those that were canceled.

[1] "PT" stands for "Perseroan Terbatas," which indicates a limited liability company. A related term, "Persero," is a type of SOE that takes the form of a limited liability company, in which ownership is not limited to the state, but might be shared with other parties under certain conditions.

Figure 1: Public–Private Partnerships That Achieved Financial Closure or Were Canceled, 1990–2019



ICT = information and communication technology.

Notes:

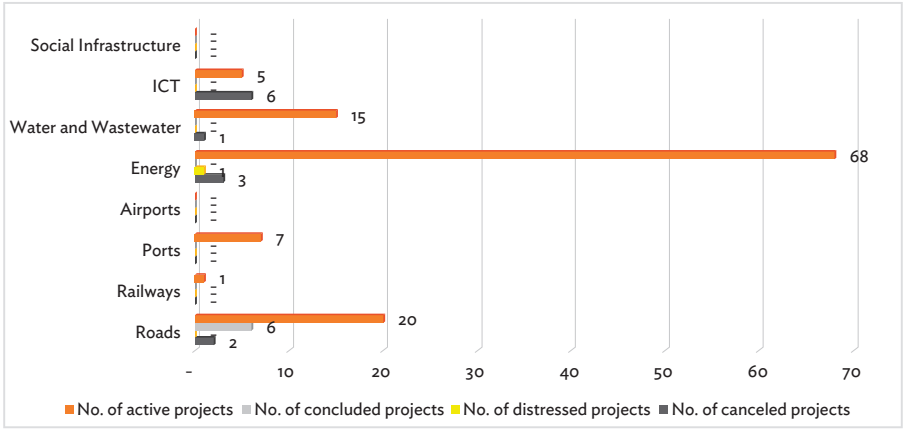
1. Total projects include projects that are active, canceled, distressed, and concluded.
2. Hyphens indicate no projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Next, Figure 2 presents the status of various PPP projects that have been awarded.

From a sector perspective, energy has the dominant share of PPPs, followed by the roads and water-and-wastewater sectors. Excluding the outlier of railways, which has had only one project, the sector with the highest average size of projects reaching financial closure is energy, at $598 million (approximately Rp8.3 billion), followed by roads, at $283 million (approximately Rp3.9 billion). Figure 3 depicts the total investment and the average size of PPP projects in each sector between 1990 and 2019.

Figure 2: Public–Private Partnership Projects Based on Status across Sectors



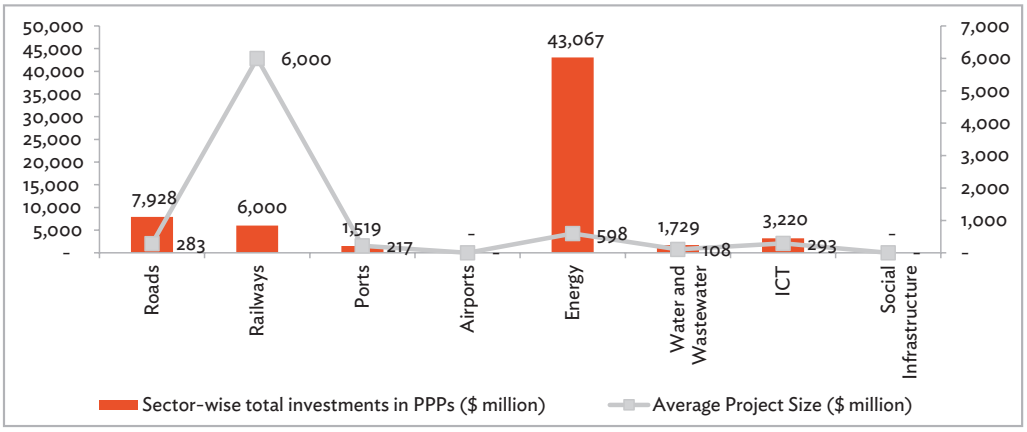
ICT = information and communication technology.

Notes:

1. Total projects include projects that are active, canceled, distressed, and concluded.
2. Hyphens indicate no projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 3: Investments in Public–Private Partnerships, by Sector, 1990–2019 ($ million)



ICT = information and communication technology, PPP = public–private partnership.

Notes:

1. The total projects include those that are active, canceled, distressed, or concluded.
2. Hyphens indicate 0 projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Out of these 135 PPP projects which achieved financial closure, about 38 of them, with a total investment of $32.20 billion (approximately Rp447 trillion), have been sponsored by the 10 entities shown in Table 1.

Table 1: Major Sponsors Active in the Infrastructure Sector

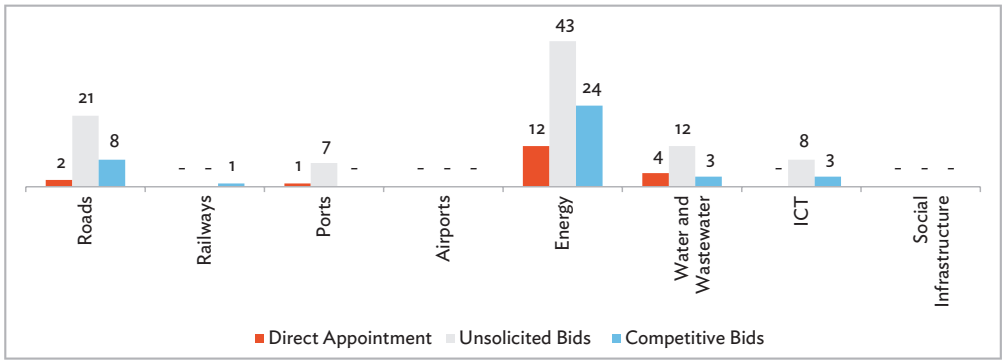
Private Sponsor	Country of Origin	Total Investment		Number of PPP Projects
		($ million)	(Rp trillion)	
Sumitomo Corporation	Japan	8,782	122.0	6
PT Adaro Energy Tbk.	Indonesia	4,968	69.0	3
PT Medco Energi Internasional Tbk.	Indonesia	3,172	44.0	10
China Railway 18th Bureau Group Co., Ltd.	China	2,400	33.3	1
ITOCHU Corporation	Japan	2,362	32.8	3
Kansai Electric Power, Co., Inc.	Japan	2,215	30.8	2
PT Jasa Marga Persero Tbk.	Indonesia	2,174	30.2	3
Marubeni Corp.	Japan	2,134	29.6	4
Korea Midland Power Co., Ltd. (KOMICO)	Korea, Rep. of	2,034	28.2	4
Mitsui & Co., Ltd.	Japan	1,960	27.2	2

PPP = public–private partnership, PT = Perseroan Terbatas (limited liability company), Tbk = Terbuka (publically listed company).

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

From 1990 to 2019, 19 PPP projects were procured through direct appointment, and 39 were procured through a competitive bidding process across various infrastructure sectors. Information on 66 projects is unavailable, according to the World Bank database. Further, the database indicates that 91 projects were unsolicited.

Figure 4: Various Modes of Procuring Public–Private Partnership Projects, 1990–2019



ICT = information and communication technology.

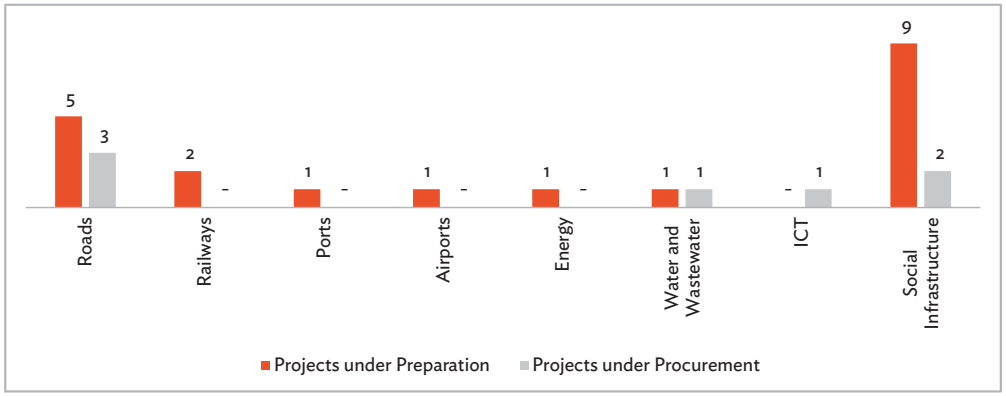
Notes:

1. The total projects include those that are active, canceled, distressed, or concluded.
2. Hyphens indicate 0 projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The "PPP Book," published annually by BAPPENAS noted that in 2019 there were 20 PPP projects at various stages of preparation in Indonesia, and 7 PPP projects under procurement across various infrastructure sectors, including roads, railways, ports, airports, energy, water and wastewater, ICT, social infrastructure, among others.[2]

Figure 5: Public–Private Partnership Projects under Preparation and Procurement, 2019



ICT = information and communication technology.

Notes:

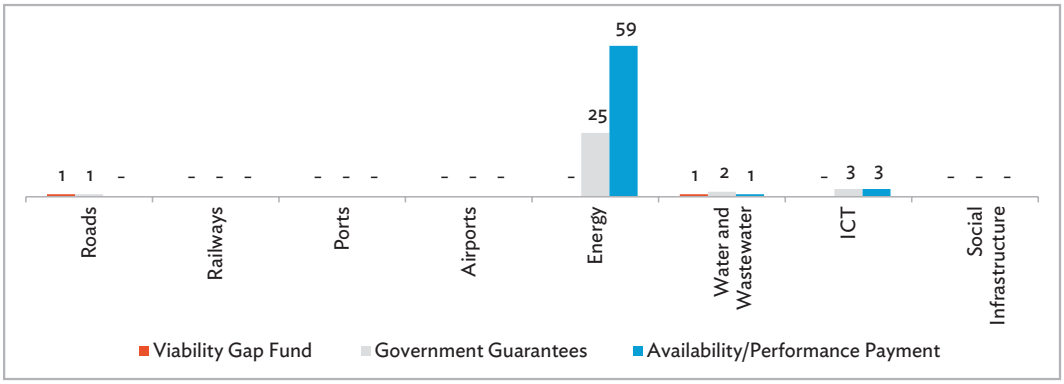
1. Total projects include projects that are active, canceled, distressed, and concluded.
2. Hyphens indicate no projects.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

[2] Government of Indonesia, BAPPENAS. 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta. https://library.pppknowledgelab.org/documents/5826/download.

From 1990 to 2019, only two projects were supported through Indonesia's viability gap fund, 31 projects were supported through government guarantees, and 63 projects were supported through availability payments.

Figure 6: Public–Private Partnership Projects with Government Support, 1990–2019



ICT = information and communication technology.

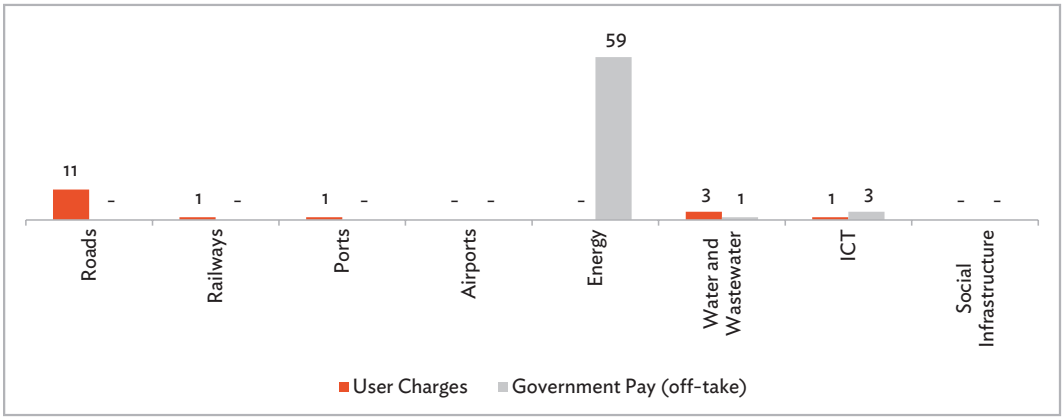
Notes:

1. The total projects include those that are active, canceled, distressed, or concluded.
2. Hyphens indicate 0 projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

During the same period, the government supported 22 PPP projects using funds from user charges, while 64 PPP projects were supported from government pay (offtake). Information on 49 projects was unavailable or designated as "not applicable" on the relevant government database.

Figure 7: Payment Mechanism for Public–Private Partnership Projects, 1990–2019



ICT = information and communication technology.

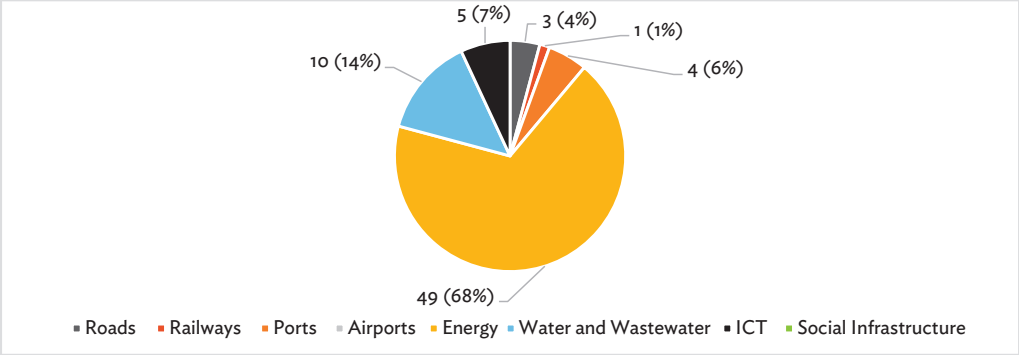
Notes:

1. The total projects include those that are active, canceled, distressed, or concluded.
2. Hyphens indicate 0 projects.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Indonesia has witnessed active participation on the part of foreign sponsors. A total of 72 projects attracted participation from foreign sponsors, predominantly in the energy sector. The distribution of these projects across various infrastructure sectors is shown in Figure 8.

Figure 8: Foreign Sponsor Participation, 1990–2019



ICT = information and communication technology.

Notes:

1. Total projects include projects that are active, canceled, distressed, and concluded.
2. The percentages do not total 100% because of rounding.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Though the PPP market in Indonesia is relatively mature, there have been various challenges to PPP implementation in Indonesia.

One of the major impediments has been the land acquisition process, which stalled quite a few PPP projects in the past. To speed up the land acquisition process, in 2012 the government adopted a new law on land acquisition in the public interest, and followed up with the implementation of a series of rules and regulations. In 2015, the government issued the fourth revision of the land acquisition law under Presidential Regulation No. 148 of 2015. The law limits the land acquisition procedure to approximately 512 days and allows for the revocation of land rights in the public interest. To further speed up the process, the regulations enable private sector entities to acquire land on behalf of a government contracting agency (GCA), and to seek subsequent reimbursement from the government. For example, in 2015, a bridging finance mechanism was set up at the Ministry of Finance (MOF) to enable the timely reimbursement of land acquisition costs to project investors.[3]

Another challenge faced by PPPs in Indonesia is the limited capacity of GCAs to properly prepare and procure projects on a par with international standards. The government is addressing this issue in various ways, such as providing more active support to the GCAs through the MOF's PPP Unit and the Committee on Acceleration of Priority Infrastructure, which employs qualified advisers to ensure quality project preparation. However, this takes place only for certain PPP projects, and PPPs are yet to become a regular feature in the GCA investment programs (footnote 3).

The public sector in Indonesia is decentralized and characterized by multiple levels of government agencies. The lack of coordination among multiple government stakeholders and the lack of clarity regarding the responsibilities of each agency during PPP project preparation and approval have often caused project delays, particularly in relation to decision-making (footnote 3).

[3] ADB. 2019. *Public–Private Partnership Monitor (second edition)*. Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

II. National Public–Private Partnership Landscape

Considering the pivotal role of private participation in infrastructure development, the government has instituted a public–private partnership (PPP) scheme for developing infrastructure projects. It has also enacted a regulation dedicated to PPP implementation in Indonesia: Presidential Regulation No. 38 of 2015 on Cooperation between Government and Business Entity in Infrastructure Provision. This regulation complies with Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015, which is implemented by the Ministry of National Development Planning (BAPPENAS). The government has over the years been supporting the acceleration and improvement of the PPP processes.

In Presidential Regulation No. 38 of 2015, PPP is defined as *kerjasama pemerintah dan badan usaha* (KPBU), meaning "cooperation between the government and business entities in infrastructure provision" (PPPs are also referred to as "KPBUs"). Business entities include private limited liability companies, foreign companies, state-owned enterprises (SOEs), regional-owned enterprises (owned by regional governments), and cooperatives. And the provider or administrator of the infrastructure concerned, based on the laws and regulations, would be a government contracting agency (GCA) that would include the relevant minister, as well as the heads of institutions, the concerned regional government, SOEs, and regional government-owned enterprises. Based on these definitions, it is evident that the contract between the government and an SOE will be considered a PPP if the contract is awarded based on PR 38/2015.

National Framework for Enabling Public–Private Partnerships

1. Public–Private Partnership Legal and Regulatory Framework

Parameter	
Does the country have –	
• National PPP laws and regulations?	✓
• Public financial management laws and regulations	✓
• Sector-specific laws and regulations	✓
• Procurement laws and regulations	✓
• Environmental laws and regulations	✓
• Laws and regulations for social compliance	✓
• Laws and regulations governing land acquisition and ownership	✓
• Taxation laws and regulations?	✓
• Employment laws and regulations?	✓
• Licensing requirements?	×

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Parameter	
What are the other components of the PPP legal and regulatory framework?	Other key supporting components (elaborated below) include: • Ministry of National Development Planning/ National Development Planning Agency, per Regulation No. 4 of 2015 • LKPP Regulation No. 19 of 2015 • LKPP Regulation No. 29 of 2018

LKPP = National Public Procurement Agency, PPP = public–private partnership.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

Source: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

Evolution of the Legal and Regulatory Framework for Public–Private Partnerships in Indonesia

SOEs have been the key entities participating in infrastructure projects under PPPs. The tepid level of participation by private firms, especially foreign investors, is a major challenge for PPP implementation in Indonesia. To overcome this problem, the government has implemented major regulatory reforms and established new agencies to support PPP formation since 2010. The PPP regulatory framework in Indonesia has undergone major refinements since it was first established in 1990 to address the challenges and changing needs of PPPs, as well as the evolving business environment.[4]

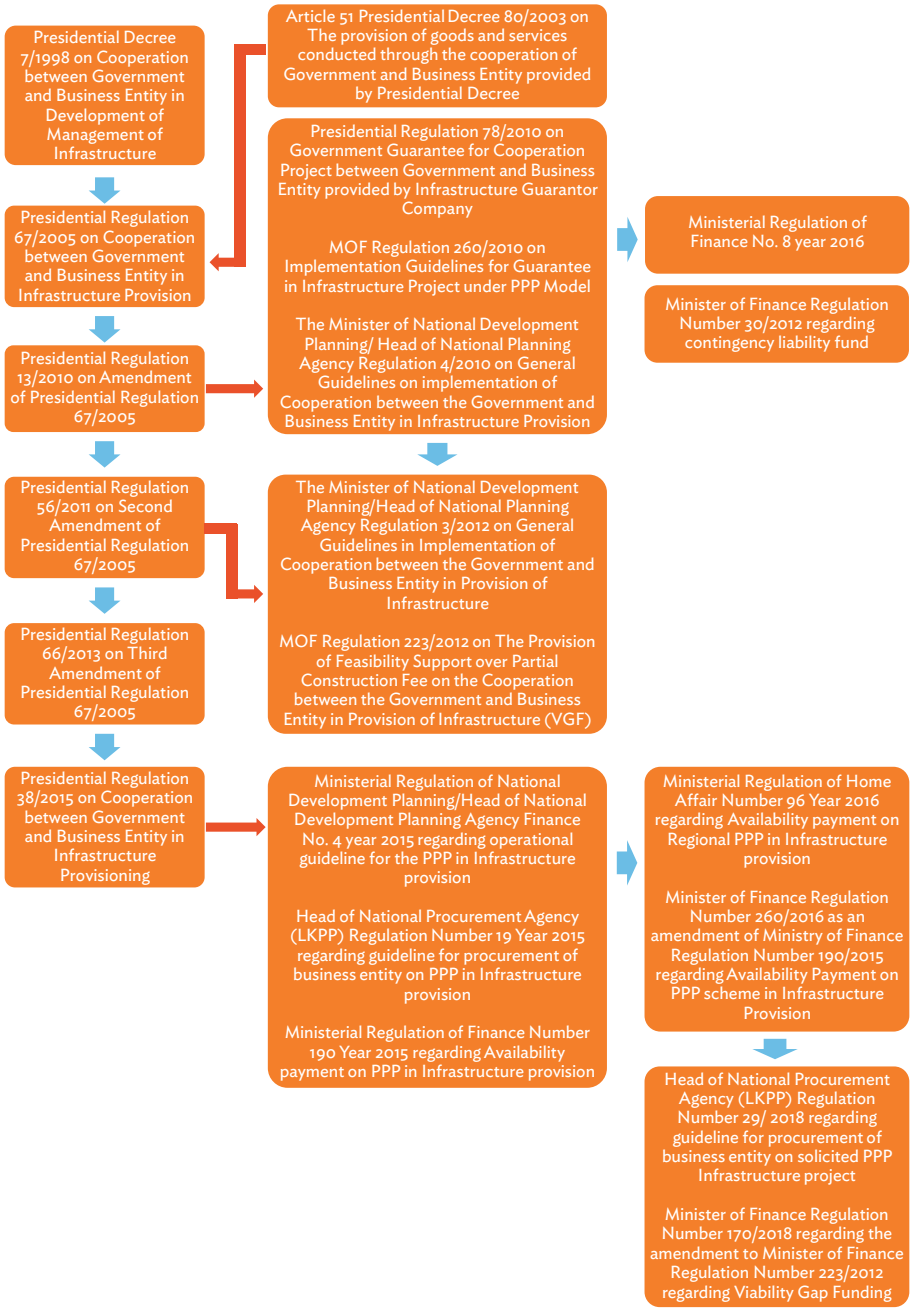
Figure 9 depicts the evolution of the legal framework of PPPs in Indonesia since 1990, and key principles behind such evolution.[5]

Presidential Regulation No. 67 of 2005, related to cooperation between government and business entities in the provision of infrastructure, was a key milestone in the development of a PPP regulatory framework in Indonesia. The framework continued to evolve, and the current PPP regulation, Presidential Regulation No. 38 of 2015, offers more incentives for private participation, especially in terms of government support schemes. The current regulatory framework offers three major improvements over the previous one: (i) the inclusion of social infrastructure; (ii) the provision of stronger government support through mechanisms such as the viability gap fund (VGF), project development facility (PDF), and availability payments; and (iii) funding provided by the government to acquire land for infrastructure projects.

4 Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

5 Government of Indonesia, BAPPENAS. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta (3 years: 2013, 2015, and 2019). https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202013.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202015.pdf, https://library.pppknowledgelab.org/documents/5826/download; Government of Indonesia. *Presidential Regulation No. 38 of 2015.*

Figure 9: The Evolution of Public–Private Partnerships in Indonesia, 1990–2020



LKPP = National Public Procurement Agency, MOF = Ministry of Finance, PPP = public–private partnership.

Sources: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia; Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*. Jakarta, Indonesia (3 years: 2015, 2017, and 2019).https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202015.pdf, https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://library.pppknowledgelab.org/documents/5826/download.

Table 2: Major Improvements in the Regulatory Framework for Public–Private Partnerships

Aspects	Previous Regulation (from Presidential Regulation No. 67 of 2005)	Current Regulation (from Presidential Regulation No. 38 of 2015)
Definition of PPPs	"[A] written agreement between the private sector and government entity to increase the development of infrastructure"	"[C]ooperation between the government and private sector to increase the development of infrastructure for both projects and social services, in which most or all of the resources are furnished by the private sector and **the risk management will be allocated to both parties**' (viz., GCA and private entity)" (Emphasis in the original)
Type of PPP project	Physical infrastructure in eight sectors: transportation, roads, irrigation, drinking water, wastewater, telecommunications and information, electricity, and natural oil and gas infrastructure	Physical infrastructure in five sectors: water resources, waste management, renewable energy, energy conservation, and city facilities; social and economic infrastructure in seven sectors: education, sports and the arts, industrial zones, tourism, health, prisons, and community housing.
Method of appointment	• Tender • Direct appointment (if only one participant is prequalified)	• Tender • Direct appointment (limited to certain circumstances, such as technology and proximity requirements)
Payment mechanism for return of investment	User fee regulated by tariff	• User fee regulated by tariff • Availability payment • Any other form that does not contravene prevailing laws and regulations
Government support	Tax incentives	• Tax incentives • VGF • PDF • Other forms in accordance with applicable regulations, such as those concerning direct lending
Government guarantee	Not stipulated	Government guarantee provided by the Indonesia Infrastructure Guarantee Fund (IIGF)
Partial funding	Not stipulated	Partial financing by the GCA of construction supporting a PPP facility
Unsolicited project	• Receive a compensation (maximum 10% of additional value) in bidding process • Indemnification of fore cost paid out by the initiator	• Compensation by adding 10% to a score in the bidding process • Right to match to the best bidder • Indemnification of fore cost paid out by the initiator
Land acquisition	Not stipulated	Funded by the government budget or regional government budget (only for PSNs) through the GCA, based on the reimbursement mechanism
Success fee mechanism	Not stipulated	Project preparation costs possibly imposed on the winning bidder (feasibility study, transaction process, and success fee)

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Aspects	Previous Regulation (from Presidential Regulation No. 67 of 2005)	Current Regulation (from Presidential Regulation No. 38 of 2015)
Transaction process	Procurement of the business entities in the context of a cooperation agreement, conducted through public auction (tender)	The procurement of the business entities possibly done through a tendering process or by direct appointment
Financial close	12 months, with a 12-month extension	12 months, with a 6-month extension
Recovery of investment	User fee	• User fee • Availability payment
PPP node—*simpul* (knot) PPP—in the GCA	Nonexistent	Policy prepared by PPP node, which also oversees synchronization, coordination, supervision, and evaluation of PPP development

GCA = government contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund, PDF = project development facility, PPP = public–private partnership, PSN = national strategic project, VGF = viability gap fund.

Source: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

Regulatory Framework for Public–Private Partnerships in Indonesia

As indicated earlier, there are several regulations that directly influence the PPP framework of the country. These include regulations on the operation of PPPs and regulations on the extension of government support measures to facilitate the operation of the PPPs. A list of such regulations is provided in Table 3.

Table 3: Regulations on Public–Private Partnerships

Topic	Regulations
General regulations on PPPs	• Presidential Regulation No. 38 of 2015 on Cooperation on the Government and Business Entities on Infrastructure Provision • Ministry of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015 on Operational Guidelines for PPPs in Infrastructure Provision • Head of LKPP Regulation No. 19 of 2015 on Guidelines for the Procurement of Business Entities for PPPs Involved in Infrastructure Provision • LKPP Regulation No. 29 of 2018 on Guidelines for the Procurement of Business Entities for Solicited PPP Infrastructure Projects
Procedures for providing government support and guarantees	**Government Support** • Ministry of Finance Regulation No. 170 of 2018, regarding an Amendment to the Ministry of Finance Regulation No. 223 of 2012 (on viability gap funding) • Ministry of Finance Regulation No. 143 of 2013 on Guidelines for Providing Feasibility Support to PPP Projects • Ministry of Finance Regulation No. 170 of 2015 on Feasibility Support for Some Construction Costs for PPP Projects • Ministry of Finance Regulation No. 73 of 2018 on Project Development Facilities **Government Guarantees** • Presidential Regulation No. 78 of 2010 on Government Guarantees for PPP Infrastructure Projects • Ministry of Finance regulation No. 260 of 2010 on Government Guarantee, as amended by Ministry of Finance Regulation No. 8 of 2016

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Topic	Regulations
	Regulation of Availability Payment • Ministry of Finance Regulation No. 260 of 2016, as an amendment to Ministry of Finance Regulation No. 190 of 2015 on Availability Payments for PPP Infrastructure Projects • Ministry of Home Affairs Regulation No. 96 of 2016 on Availability Payments Sourced from the APBD or Availability Payments from the Regional Government Budget for PPP Infrastructure Projects
Regulations on PINA	Presidential Regulation No. 20 of 2016 on the amendment of Presidential Regulation No. 66 of 2015 on the National Development Planning Agency

APBD = regional revenue and expenditure budget, LKPP = National Public Procurement Agency), PINA = Non-Government Budget Equity Financing, PPP = public–private partnership.

Source: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia.* Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

2. Types of Public–Private Partnerships

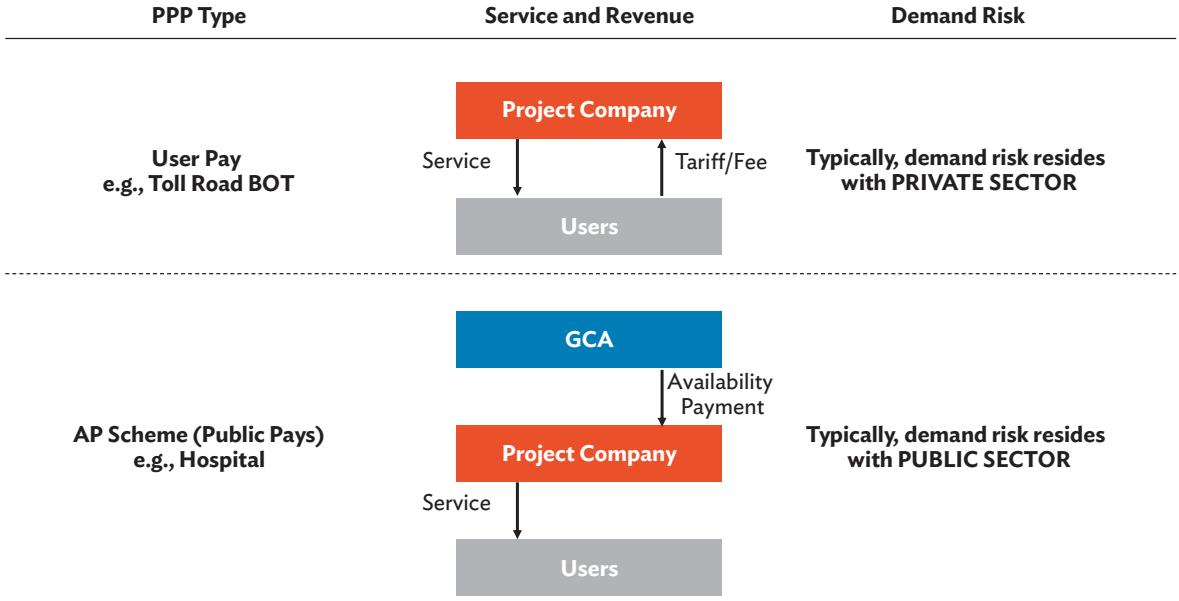
Regulations in Indonesia do not define specific types of PPP contracts. However, PPPs can be differentiated based on the payment mechanism through which the private sector partner recovers its costs receives its profits. According to Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, there are three payment mechanisms through which the private sector partner can recover its costs and earn a reasonable return on its investments. These include the

- **user fee**, in which the main income of the special purpose vehicle (SPV) is based on user payments for the services and facilities, offered in form of tariffs;
- **availability payment**, in which the government makes an annual payment of an agreed amount as the SPV's main income throughout the operation period (it essentially covers all costs—construction, operation and maintenance (O&M), financing, and statutory—and provides the returns for investors; this is a new model, introduced in the latest presidential regulation); and
- **other forms**, as long as they do not conflict with the legislation.

Based on the above, it could be construed that Indonesia allows for all standard forms of the PPPs, such as build–operate–transfer (BOT), build–own–operate–transfer (BOOT), build–operate–own (BOO), design–build–finance–operate–transfer (DBFOT), management contracts, annuity-based agreements, and O&M agreements. Generic definitions of some of these forms are provided as follows:

- **BOT—user fees.** The private sector partner builds and operates the project assets, which are transferred back to the government contracting agency (GCA) at the end of the contract period. The private sector partner recovers its investment by charging user fees. These fees are in most cases regulated by the government or are predetermined.
- **BOT—annuity contracts.** The private sector partner typically builds and operates the project assets during the concession period. However, instead of charging the users directly for the services rendered, in annuity models the GCA makes availability payments or annuity payments to the private sector partner, based on the availability of the services at certain predefined performance standards.
- **BOOT.** This is similar to BOT, with the only difference that the private sector partner owns the project assets over the duration of the PPP concession period.

Figure 10: Services, Revenues, and Risks of Various Types of Public–Private Partnerships



BOT = build–operate–transfer; GCA = government contracting agency.

Source: Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP).

- **BOO.** This is similar to BOOT, with the only difference that the project assets are not transferred back to the GCA at the end of the PPP concession period, which is the case with BOOT contracts.
- **DBFOT.** The private sector partner is responsible for designing, financing, constructing, operating, and maintaining the project assets. At the end of the concession period, the project assets are transferred back to the GCA, which then owns the assets. A variation on this arrangement is to have the private sector partner own the assets during the project tenure. In this case, it would be a design–build–finance–own–operate–transfer (DBFOOT) contract.
- **Operation and maintenance.** The private sector party would be in-charge of the O&M of project assets, and may also be required to arrange the financing.
- **Independent power producer.** The PPP Monitor also considers projects involving independent power producers (IPPs) in the energy sector to be PPPs.

3. Eligible Sectors for Public–Private Partnerships

According to Article 5 of Presidential Regulation 38 of 2015, there are 19 economic and social infrastructure sectors across which projects can be procured through the PPP route. A PPP project may also be proposed for a combination of two or more infrastructure sectors. Table 4 provides a summary of these 19 sectors and their subsectors.

Table 4: Sectors and Subsectors Targeted by Public–Private Partnerships

Sectors	Subsectors	Asset/Facility Type
Transportation infrastructure	Road Infrastructure	Main roads, Collector roads and local roads, Toll roads, Toll bridges
	Rail and Mass Transit Infrastructure	Railway facilities, urban mass transportation
	Waterways Infrastructure	Infrastructure for crossing at sea river or lake
	Seaport Infrastructure	Port facilities and passengers and cargo terminal
	Airport Infrastructure	Airports facilities
	Logistics Infrastructure	UA
Water, Wastewater and Solid Waste Management Infrastructure	Water Resources and Irrigation Infrastructure	Bulk water carrier pipelines, irrigation networks and water storage infrastructure including its supporting structures, among others reservoir, dam, and weir
	Water Supply Infrastructure	Raw water unit, Production unit, Distribution unit
	Wastewater Infrastructure	Centralized wastewater management systems including service unit, collection unit, processing unit, final disposal unit, water discharge pipeline, and sanitation Local water waste management system including local processing unit, transport unit, sludge treatment unit, final disposal unit, water discharge pipeline, and sanitation
	Solid Waste Management Infrastructure	Transportation, Processing, Waste final processing
ICT Infrastructure	Telecommunication Infrastructure	Telecommunication network, passive infrastructure such as transmission media cable ducts
	IT and Informatics Infrastructure	E-government infrastructure
Energy and Electricity Infrastructure	Power Generation	Power generation facilities
	Power Transmission and Sub-Transmission	Power transmission, and main sub-station facilities
	Power Distribution	Power distribution facilities
	Energy Conservation Infrastructure	Main road lighting, energy efficiency
Social Infrastructure	Education Infrastructure	Learning facility, laboratory, training center, research center/ study center, research and development infrastructures, business incubator, learning gallery, student practice room, Library, learning and training supporting facility
	Health Infrastructure	Hospital, such as hospital building, hospital infrastructure, and medical equipment, basic health service facility, such as building, infrastructure, and medical equipment whether for health center or clinic, health laboratory, such as health laboratory building, health laboratory, infrastructure and laboratory equipment
	Public Housing	Social housing, simple flat lease
	Government Buildings	Penitentiary institution, community hall, detention house, confiscated goods storage and state confiscated goods, temporary child placement institution, child special development institution, penitentiary hospital Public markets Sport stadium/building, Art and culture building

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Sectors	Subsectors	Asset/Facility Type
Other Infrastructure	Zone Infrastructure	Science development region, technology innovation including science, Techno park development, Industrial zone
	Oil and gas infrastructure, including bio-energy	Processing, storage, transportation, distribution
	Tourism Infrastructure	UA

UA = Unavailable

Source: Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP); government regulations on public–private partnerships.

4. Public–Private Partnership Institutional Framework

Parameter	
Does the country have a national PPP unit?	✓
What are the functions of the national PPP unit?	
• Supporting the design and operationalization of the National PPP Enabling Framework?	✓
• Helping develop a national PPP pipeline?	✓
• Supporting the arrangement of funding for project preparation (budgetary allocations, technical assistance funding from multilateral development agencies, operating a dedicated project preparation/ project development fund)?	✓
• Guidance for project preparation to and coordination with the government agencies responsible for sponsoring the projects?	✓
• Making recommendations to the PPP Committee and/or other approving authorities to provide approvals associated with various stages of the PPP process?	✓

PPP = public–private partnership.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

Sources: Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP); Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download; World Bank Group. Procuring Infrastructure Public–Private Partnerships 2018 in Indonesia. https://bpp.worldbank.org/content/dam/documents/bpp/indonesia.pdf.

In Indonesia, there are multiple entities have been identified by the World Bank as facilitating the work of the PPP Unit. The key ones include:

- Directorate of Development for Public Private Partnership, at the Ministry of National Development Planning (BAPPENAS): The directorate's main functions include formulating national development plans, drafting budgets, evaluating plan implementation, functioning as a government think tank, and coordinating and administering development plans and other activities in various areas.[6] In addition, BAPPENAS, through the Directorate of PPP and Financial Engineering, ensures that PPP projects are in line with PPP-planning regulations and national development plan and policies.

6 BAPPENAS. Role and Function of BAPPENAS. https://www.bappenas.go.id/en/profil-bappenas/tupoksi/.

- Directorate of Government Support and Infrastructure Financing Management, Ministry of Finance: This directorate evaluates the financial and economic aspects of proposed PPP projects, and makes recommendations regarding government support to the relevant government contracting agency (GCA).

The World Bank also mentioned the Indonesia Infrastructure Guarantee Fund (IIGF), PT Sarana Multi Infrastruktur (PT SMI), and the National Public Procurement Agency (LKPP) as facilitators.[7]

A coordination system among the various government agencies is required to manage the cross-sector and cross-agency coordination of PPPs and to ensure the success of PPP projects. According to PPP Book 2019,[8] the PPP Joint Office (PPP JO) was established in December 2016 to oversee that coordination. It assists the GCAs and investors, and also answers any queries about PPPs in Indonesia. In fact, the PPP JO acts as a "one-stop" service for PPP schemes in Indonesia. It has no structural ties with other government agencies; instead, the PPP JO primarily focuses on coordination and capacity building. Its members include:

- BAPPENAS
- MOF (Kementerian Keuangan)
- Coordinating Ministry of Economic Affairs (Kementerian Koordinator Bidang Perekonomian) which works to prevent bottlenecks (footnote 8).

BAPPENAS and the GCAs are typically responsible for the initiation of projects, early economic assessments, and for the delivery of the preliminary studies. Further, in compliance with Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015, BAPPENAS is responsible for publishing the PPP Book, to provide the information on available infrastructure investments in Indonesia for potential investors or any other PPP stakeholders. Projects listed in the PPP Book are selected through a rigorous review and screening process by BAPPENAS (footnote 8).

The PPP JO coordinates with the MOF on fiscal facilitation, and with the IIGF on obtaining government guarantees.

Various entities referred to above are also responsible for making recommendations and for facilitating approvals at various stages of the PPP process. The PPP JO does not have legal powers, but the PPP Unit (within the MOF) and BAPPENAS fulfill that role when it comes to approvals at the appropriate stages.

7 World Bank Group. *Procuring Infrastructure Public–Private Partnerships 2018 in Indonesia.* https://bpp.worldbank.org/content/dam/documents/bpp/indonesia.pdf.

8 BAPPENAS, *Public–Private Partnership Book 2019*. https://library.pppknowledgelab.org/documents/5826/download.

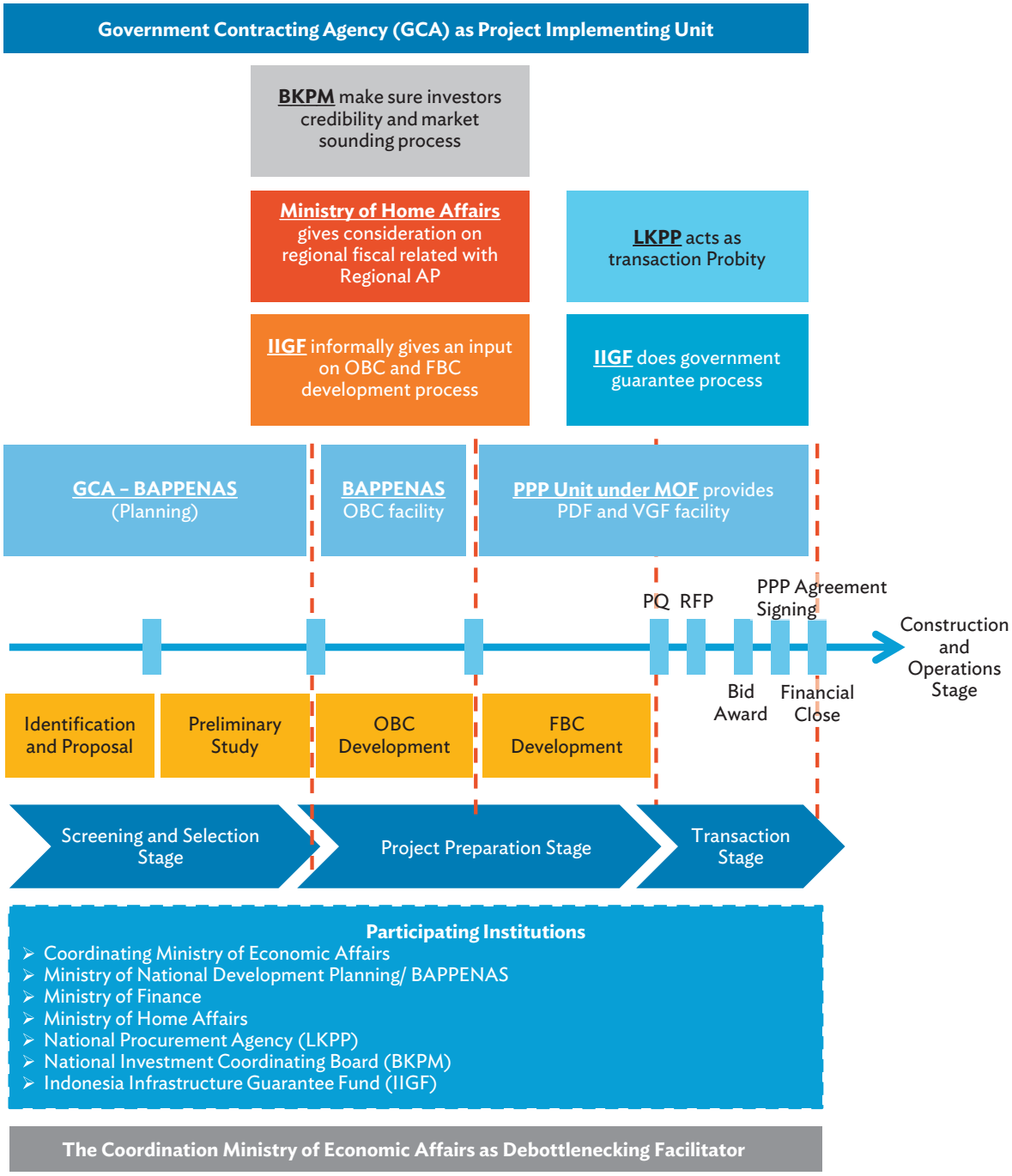
Table 5: Principal Public Agencies, Institutions, and Firms that Support Public–Private Partnerships in Indonesia

Category	Key Agencies	Function
Government agencies	Directorate of PPP and Design, BAPPENAS	• Assists in the completion of initial preparation documents.
	KPPIP	• The main agency that coordinates PPPs and prevents bottlenecks in PSNs and priority projects
	MOF	• Provides funding and assistance in completing the final preparation documents
	GCA	• Prepares and/or evaluates PPP project • Selects and signs Cooperation Agreement, and issues PPP project license to the concerned private company
	BKPM	• Verifies the credibility of the investor and assists the GCA in conducting market sounding.
	PPP Joint Office	• Coordinates, facilitates, and provides capacity building for government agencies, the GCA, and private entities to accelerate PPP project implementation
	LKPP	• Ensures transaction probity and fair tendering for PPP projects
	Coordinating Ministry for Economic Affairs	• Supports the process of eliminating bottlenecks in PPP projects
	MOHA	• Evaluates project value and regional fiscal capacity for PPP projects that use availability payments
	PINA Unit, BAPPENAS	• Assists private entities in finding alternative nongovernment financing mechanisms to accelerate the financial close
Supporting institutions (state-owned enterprises)	PT SMI	• Provides infrastructure financing and advisory services for PPP projects
	IIF	• Provides capital for infrastructure and advisory services for PPP projects
	IIGF	• Provides contingency support and guarantees against government-related risks to private entities
	LMAN	• Funds land acquisition for PPP projects listed as national strategic projects
Private firms	SPV	• An Indonesian legal entity owned by the project sponsors, which enters into a Cooperation Agreement with a GCA, or receives a direct appointment from the government, to provide a particular service or build infrastructure on a PPP basis

BAPPENAS = Ministry of National Development Planning, BKPM = Indonesia Investment Coordinating Board, GCA = government contracting agency, IIF = Indonesia Infrastructure Finance, IIGF = Indonesia Infrastructure Guarantee Fund, KPPIP = Committee for Acceleration of Priority Infrastructure Delivery, LKPP = National Public Procurement Agency, LMAN = State Asset Management Agency, MOF = Ministry of Finance, MOHA = Ministry of Home Affairs, PINA = Non-Government Budget Equity Financing, PPP = public–private partnership, PT-SMI = Indonesia State-Owned Infrastructure Financing Company, SPV = special purpose vehicle.

Source: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

Figure 11: Government Contracting Agency as Project Implementing Unit



BAPPENAS = Ministry of National Development Planning; BKPM = Indonesia Investment Coordinating Board, FBC = Full Business Case, GCA = government contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund, LKPP = National Public Procurement Agency, MOF = Ministry of Finance, OBC = Outline Business Case/ Pre Feasibility Study, PDF = project development facility, PPP = public–private partnership, RFP= request for proposal, VGF = viability gap fund.

Source: Government of Indonesia, BAPPENAS. 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019.* Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

Entities Responsible for Public–Private Partnership Project Identification, Approval, and Oversight

Parameter	
Who is responsible for identifying, preparing, and procuring the PPP projects?	Minister, head of an institution, head of a region, SOE director, or ROE director acting as the GCA
Is there a PPP Committee for providing approvals at various stages of PPP projects?	×[a]
Who are the approving authorities other than the PPP Committee for the PPP projects?	Head of an institution, head of a region, SOE director, ROE director, or the minister of national development planning
Does the country have an independent think tank for various PPP planning, budgeting, and policy decisions?	×[b]
Is there a legislature for the PPP program oversight?	✓[c]

GCA = government contracting agency, PPP = public–private partnership, ROE = regional government-owned enterprise, SOE = state-owned enterprise.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

[a] A procurement committee is created during the transaction stage of a project that fulfils the responsibilities assigned to it by the head of the GCA. These responsibilities may include the evaluation of proposals, as well as approvals and/or recommendations during the transaction stage. However, government regulations do not specify the formation of a single committee empowered to oversee approvals at all stages of a PPP project.

Ministry of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015 recommends the creation of a "PPP Node" at the GCA level. The PPP Node would have many crucial responsibilities, such as providing supervision and advice for specific projects at various stages; formulating policies; and/or synchronizing, supervising, and/or evaluating PPP activities.

[b] There is no independent think tank that is responsible for PPP planning, budgeting, and policy-related matters. Various entities—such as the Coordinating Ministry of Economic Affairs, the Committee for Acceleration of Priority Infrastructure Delivery, and the Ministry of Finance—play a role in the PPP planning, budgeting, and policy-related matters.

[c] There is no specific legislation on overall PPP oversight. However, Regulation No. 4 of 2015 mentions the role of a PPP Node that is formed "with the purpose of formulation of policies, and/or synchronization and/or supervision, and/or evaluation of the PPP activity." Further, Article 375 of Regulation No. 4 of 2016 on the Organization and Work Procedure of the Ministry of PPN/BAPPENAS specifies that "the Directorate of Public Private Partnership and Design and Development has the task of carrying out the coordination, formulation and implementation of policies, as well as monitoring, evaluating and controlling national development planning in the field of public and private collaboration."

For national priority projects, the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) was formed to accelerate priority infrastructure and to help improve the quality of project preparation by adopting the Pre-Feasibility Study (OBC) Guidelines.

Entities Responsible for Monitoring Public–Private Partnership Projects

Parameter	Response
Is there an entity for monitoring of PPP Projects post Commercial Close?	✓
Is there an entity for monitoring and management of fiscal risks and liabilities from PPP projects for Ministry of Finance (MOF)?	✓

PPP = public–private partnership.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015 provides for the monitoring of PPPs during the construction and operations stage through to termination. According to the regulation, the PPP Node is responsible for the supervision and monitoring of the performance of the special purpose company (SPC) at various stages of the project, to ensure that it complies with the PPP agreement.

Chapter VI, point E (2) says that the "PPP Node assists the GCA in supervising and controlling the implementation of PPPs in accordance with the agreed provisions listed in the PPP agreement." The regulation then specifies the role of PPP Node during various stages of project development.

Within the MOF, the Directorate General of Budget Financing and Risk Management is responsible for overseeing and managing the fiscal risks for the government from PPP projects. The directorate also publishes on a quarterly basis the overall fiscal risks and guarantees accorded by the government (including those concerning PPP projects); issues, if any; and the maturity profile, among other items.

5. The Public–Private Partnership Process

Parameter	
Does the PPP legal and regulatory framework provide for a PPP implementation process covering the entire PPP life cycle?	✓ (except for the post-award contract management)
Does the Feasibility Assessment Stage cover –	
• Technical feasibility?	✓
• Socioeconomic feasibility?	✓
• Environmental sustainability?	✓
• Financial feasibility?	✓
• Fiscal affordability assessment?	✓
• Legal assessment?	✓
• Risk assessment and PPP project structuring?	✓
• Value for Money assessment?	✓
• Market sounding with stakeholders?	✓
Is the PPP procurement plan required?	✓
Is there a need to set up a separate PPP procurement committee?	✓
Is competitive bidding the only method for selection of PPP private developer?	×
Is the prequalification stage necessary? Or does the PPP legal and regulatory framework allow flexibility to skip the prequalification stage?	Prequalification not obligatory
Does the PPP legal and regulatory process provide the option to the preferred bidder for contract negotiations?	✓ (in case of direct appointment)

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Parameter	
Does the PPP Legal and Regulatory Framework allow unsuccessful bidders to challenge the award/ submit complaints?	×[a]
What is the maximum time allowed for submitting a complaint/ challenging the award by unsuccessful bidders from the announcement of the preferred bidder?	5 days
Does the PPP legal and regulatory framework provide for transparency?	✓
Which of the following are required to be published?	
• Findings from the feasibility assessment?	✓[b]
• Procurement notice?	✓
• Outcome of stakeholder consultations from market sounding?	✓
• Clarifications to prequalification queries?	✓
• Prequalification results?	✓
• Clarifications to pre-bid queries?	✓
• Results for the bid stage and selection of preferred bidder?	✓
• Final concession agreement to be entered between the government agency and the preferred bidder? And other PPP project agreements executed between government agency and preferred bidder?	×
• Confidentiality	✓

GCA = government contracting agency, PPP = public–private partnership, VFM = value for money.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

[a] ADB. 2019. *Public–Private Partnership Monitor (second edition).* Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

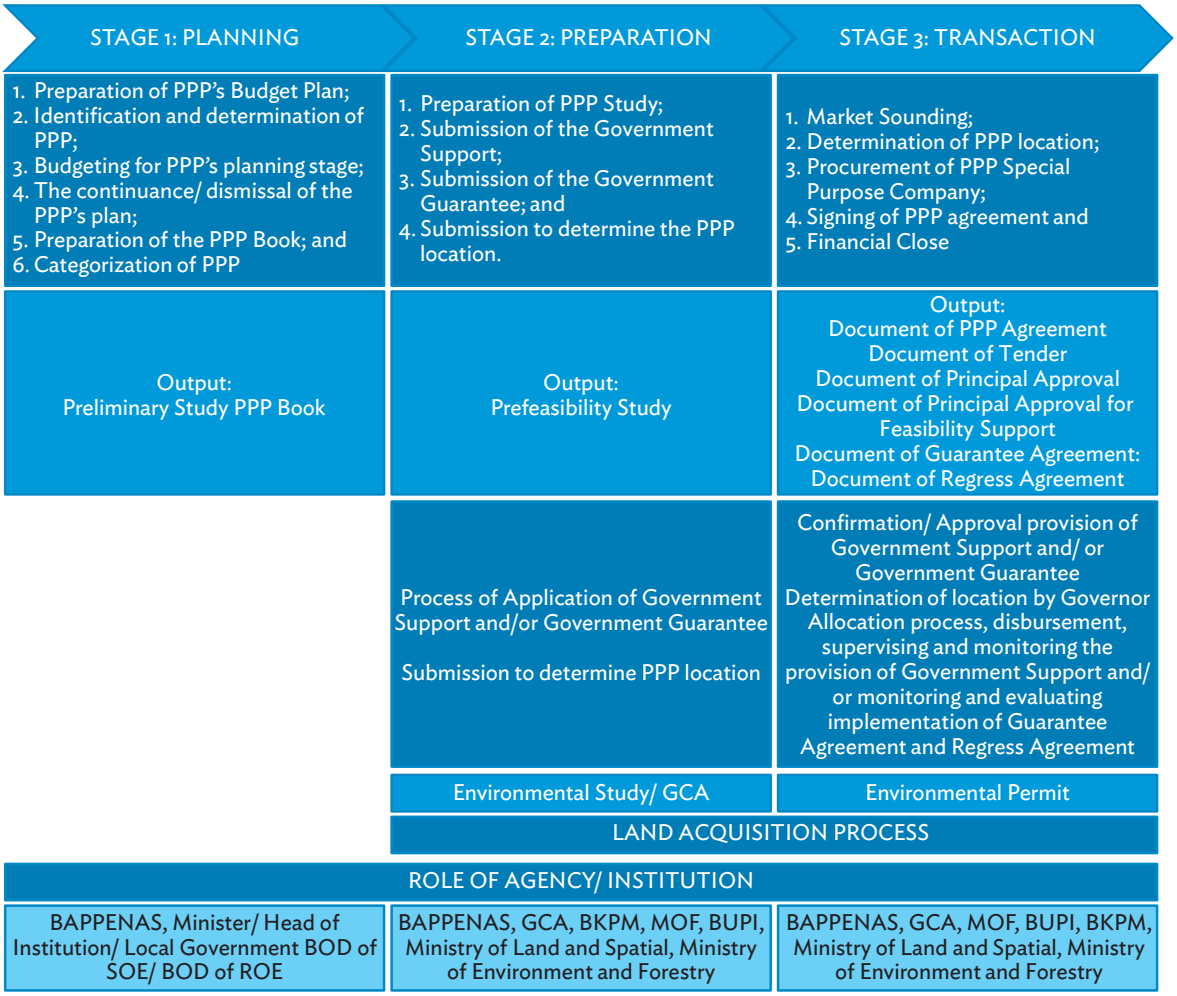
[b] Typically, the Ministry of National Development Planning (BAPPENAS) includes the basic pre-feasibility outcomes in *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*, an annual publication that includes the project descriptions, specifications, findings of environmental impact assessments, land issues, project structure briefs, and indicative internal rates of return for the projects.

The implementation of a PPP project consists of three key stages specified in Presidential Regulation No. 38 of 2015:

- Planning stage
- Preparation stage
- Transaction stage

Figure 12 highlights the various steps involved in each stage of the process, the output of each stage, and the various institutions involved at each stage. Table 6 presents the process of each stage in greater depth.

Figure 12: The Three Stages of a Public–Private Partnership Project and Their Outputs



GCA = government contracting agency, BAPPENAS = Ministry of National Development Planning, BKPM = Indonesia Investment Coordinating Board, BOD = board of directors, BUPI = Infrastructure Guarantee Corporation, ROE = regional government-owned enterprise, MOF = Ministry of Finance, SOE = state-owned enterprise.

[a] PPP Book refers to *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*, published annually by BAPPENAS.

Source: Government of Indonesia. Presidential Regulation No. 38 of 2015.

Table 6: Descriptions of the Three Stages of a Public–Private Partnership Project

Planning Stage	Description
Preparation of the PPP budget plan	A government minister, head of a relevant institution or agency, or the head of the regional government prepares a budget plan for the implementation of a PPP project in accordance with laws and regulations. The preparation of a budget plan covers three stages of the PPP process: planning, project preparation, and transaction. The GCA is required to ensure that funding from an appropriate source (ministry, institution, regional government) is available for PPP implementation.
Identification and determination of the PPP project	The initiator of the project conducts a preliminary study of the proposed project based on factors such as the • PPP form, PPP financing and source of funds, the transaction process, and schedule; • need analysis, which is based on the technical and economic rationales, gaps in current service levels, and public consultations; • compliance, with reference to regulations, master plans, and other related national and regional requirement; • value-for-money criteria; • potential revenue sources, including user fees, government support, fiscal status, etc.; • recommendations and planning; and • the preliminary study, which is the initial study conducted by the GCA to describe the requirements of the infrastructure provision and the benefits of that provision if delivered with the cooperation of the SPC through the PPP mechanism.
Budgeting for the planning stage	The GCA is required to ensure the availability of funding for the planning stage, which should at least consider the budget required for the preparation of a preliminary study and public consultations.
Public consultations	The GCA conducts public consultations to provide explanations regarding the planned PPP project and to obtain feedback and inputs from relevant stakeholders, which are then incorporated into the PPP project plan.
Decision to continue or reject the PPP plan	Once the GCA decides to continue with the PPP, it proposes the PPP project to BAPPENAS, along with the following supporting documentation: • for the PPP proposal during the preparation process: – PPP preparation documents, and – summary sheet based on these documents; • for ready-to-offer PPP projects: – PFS document, – summary of pre-feasibility study document, and – letter containing statement of principal approval of government support and/or government guarantee (if needed).
Preparation of the PPP Book[a]	BAPPENAS prepares the PPP Book based on: • a proposal from the GCA indicating the need for government support and/or government guarantee, and • the result of identification of projects by BAPPENAS based on national development priorities BAPPENAS evaluates and assesses the project proposals, and includes them in the PPP Book in the appropriate category.
Categorization of PPP projects	Projects listed in the PPP Book are categorized either as ready-to-offer PPP projects or as projects under preparation in accordance with the criteria defined in Presidential Regulation No. 38 of 2015.
Support for activities during the planning stage	Activities related to the environmental study: • The GCA conducts a preliminary study to identify the technology that the PPP will implement, a sustainable technology whose environmental impact can be well managed in accordance with the literature and relevant studies. Activities related to land acquisition: • At the selected location, the GCA examines the project site, its land area, and estimated price, in accordance with laws and regulations.

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Preparation Stage	Description
PFS[b]	• The GCA arranges the government funding to carry out various studies during the PPP preparation stage, including a – preliminary PFS; – FPS; – environmental study, if needed; and – preparation for agency procurement, if needed. • The preliminary PFS document includes, at the very least, studies or assessments concerning: – legal compliance, – role definitions, – technology options, – forms of PPPs and their suitability, – socioeconomic benefits, – market demand, – risk, – preliminary socioenvironmental factors, and – government support requirements. • The FPS is intended to obtain stakeholder approval of the preliminary PFS. Further, the it aims to – ensure that the PPP concept in the preliminary PFS has been updated and improved based on inputs from various stakeholders; – ensure that the GCA has sent the request for government support to the relevant authority; – verify that the PPP team has been formed; – plan the preparation of the land acquisition, resettlement activities, etc.; – schedule the preparation of a detailed environmental study; and – identify ways to address any legal issues that may exist.
Public consultations	During the PPP preparation stage, the GCA conducts public consultations and a market sounding, with the objective of • reviewing the compliance with the social and environmental standards, in accordance with the provisions of the relevant environmental and social laws and regulations; • obtaining inputs regarding public needs related to the PPP plan; and • ensuring PPP readiness. The market sounding aims to obtain inputs and responses from the PPP stakeholders.
Activities during the preparation stage	During the preparation stage, the GCA also initiates the preparation of applications for government support and/or guarantees, and for other support requirements. The GCA also finalizes the PPP project site, and seeks the necessary approvals for the project.
During the preparation stage, the PPP project undergoes a series of quantitative studies to gauge its viability in terms of financial value, economic value, risk analysis and mitigation, etc. In this stage, private sector players are invited to provide inputs on the PPP project through public consultations and market soundings. In general, it takes 6 to 8 months to complete the preparation stage.	
Transaction Stage	**Description**
Market sounding	The market sounding is done to gain input from, and an understanding of, the stakeholders in the PPP project. The GCA conducts a market sounding through one-on-one meetings and PPP promotion with prospective investors, national and international financial institutions, and other potential candidates for PPP participation. Based on the results of the market sounding conducted by the GCA, the procurement committee can revise the procurement document.
Selection of PPP project site	• The GCA submits a site-selection application in accordance with the relevant laws and regulations. The selection of a site for the PPP project is done prior to the prequalification of the SPC. • The GCA ensures that the PPP has obtained an environmental permit.

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Transaction Stage	Description
Procurement of the SPC	The procurement process for the SPC is defined under LKPP Regulation No. 29 of 2018. The procurement committee is appointed to conduct the selection of the SPC for the PPP project. The procurement committee undertakes the preparatory assessment to ensure the project's readiness. The procurement implementation covers prequalification and selection of implementing business entity, through a tender or by direct appointment. The LKPP Regulation No. 29 of 2018 defines the process of prequalification, conditions under which to choose single-stage tendering or two-stage tendering, and the direct appointment process.
Signing of the PPP agreement	• The winning bidder establishes the SPC within 6 months after winning the contract. The SPC signs the PPP agreement no later than 40 days after the SPC was established. • Preliminary requirements, such as all the approvals, must be in place for the PPP agreement to be effective. • PPP agreement monitoring and management is conducted across all stages of the project, including preconstruction, construction, operations, and termination, and must be overseen by the PPP node, appointed by the GCA.
Financial closure	After signing the PPP agreement, the SPC is required to secure financing for the project. This must be obtained no longer than 12 months after signing the PPP agreement, though this period may be extended from time to time if the failure to obtain funding does not contribute to the failure of the PPP project. Every extension given for the financial close should be no longer than 6 months. The financial close could be done gradually over the project cycle. The financial close is declared to be achieved when a loan agreement is signed and the loan is able to be partially drawn down. In the event that the PPP is divided into several stages, the financial close is declared to be achieved when: • a loan agreement to finance one of the PPP stages has been signed, or • the loan is able to be partially drawn down during the PPP stage referred to above. If the period requirement cannot be fulfilled by the SPC, the PPP agreement may be terminated, and the GCA reserves its right to execute the performance bond.

BAPPENAS = Ministry of National Development Planning, FPS = final pre-feasibility study, GCA = government contracting agency, LKPP = National Public Procurement Agency, PFS = pre-feasibility study, PPP = public–private partnership, SPC = special purpose company.

[a] PPP Book refers to *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*, published annually by BAPPENAS.

[b] The nomenclature used in the *Presidential* Regulation 38 *of* 2015 is *from a* preliminary pre-feasibility study and *from a* final pre-feasibility study.

Sources: Government of Indonesia, National Public Procurement Agency (LKPP). Regulation No. 4 of 2015; LKPP Regulation No. 29 of 2018; Government of Indonesia. Presidential Regulation No. 38 of 2015.

According to LKPP Regulation No. 29 of 2018, the GCA establishes a procurement committee whose responsibilities include (i) preparing and implementing business entity procurement, (ii) assisting the GCA in the preparation of the PPP contract (commercial close) for signing, and (iii) assisting in the preparation of the financial close. The procurement committee plays a critical role throughout the transaction process, ensuring a transparent process and successful closure of the transaction. The PPP team, which is formed by the GCA, assists the GCA and the procurement committee during all the stages of project preparation and transaction.

6. Standard Operating Procedures, Toolkits, Templates, and Model Bid Documents for Public–Private Partnerships

Parameter	
Does the country have PPP Guidelines/PPP Guidance Manual?	✓
Does the PPP Guidelines/PPP Guidance Manual adequately cover the process, entities involved, roles and responsibilities of various entities, approvals required at various stages, and the timelines for the various stages of the PPP project life cycle?	✓
What are the templates and checklists available in the PPP Guidelines/PPP Guidance Manual?	
• Project Needs Assessment and Options Analysis checklist?	✓
• Project Due Diligence checklist?	✓
• Technical Assessment checklist?	✓
• Environmental Assessment checklist?	✓
• PPP Procurement Plan template?	✓
Does the country have standardized/model bidding documents for PPPs?	
• Model Request for Qualification (RFQ) document?	×
• Model Request for Proposal (RFP) document?	×
• Model PPP/Concession Agreement?	×
• State Support Agreement?	×
• VGF Agreement?	×
• Guarantee Agreement?	×
• Power Purchase Agreement?	×
• Capacity Take-or-Pay Contract?	×
• Fuel Supply Agreement?	×
• Transmission and Use of System Agreement?	×
• Performance-based Operations and Maintenance Contract?	×
• Engineering, Procurement and Construction Contract?	× (except for PPAs, which are available in subsectors for non-WTE projects)
Does the country have standardized PPP agreement terms?	×
Does the Country have standardized/ model tool kits to facilitate identification, preparation, procurement, and management of PPP projects?	
• PPP Family Indicator?	×[a]
• PPP Mode Validity Indicator?	×[a]
• PPP Suitability Filter?	×[a]
• PPP Screening Tool?	×[a]
• Financial Viability Indicator Model?	×[a]
• Economic Viability Indicator Model?	×[a]
• VFM Indicator Tool?	×[a]
• Readiness Filter?	×[a]

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Parameter	
Is there a framework for monitoring fiscal risks from PPPs including the following?	
• Process for assessing fiscal commitments?	✓
• Process for approving fiscal commitments?	✓
• Process for monitoring fiscal commitments?	✓
• Process for reporting fiscal commitments?	✓
• Process for budgeting fiscal commitments?	✓
Are there fiscal prudence norms/thresholds to limit fiscal exposure to PPPs?	✓
Is there a process for assessing and budgeting contingent liabilities from PPPs?	UA

PPA = power purchase agreement, PPP = public–private partnership, RFP = request for proposal, RFQ = request for qualification, VFM = value for money, VGF = viability gap fund, WTE = waste-to-energy.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

[a] There are reference documents. For example, the Office of Public–Private Partnership (OPPP), at the Asian Development Bank, has delivered screening tools for teaching hospitals and higher-education facilities that Ministry of Health, Ministry of Higher Education, and the Ministry of National Development Planning (BAPPENAS) can utilize for such subsector projects.

The following guidelines are available:

- Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015, regarding the operational guidelines for PPPs in infrastructure provision.
- Head of LKPP Regulation No. 19 of 2015, regarding guidelines for procuring business entities for PPPs in infrastructure provision.
- Head of LKPP Regulation No. 29 of 2018, regarding the guidelines for procuring business entities for solicited PPP infrastructure projects.

These regulations largely define the process, approvals, timelines, and other related criteria set by the GCA and procurement committee for the selection of the special purpose company (SPC). In addition, the table provided in the government's PPP regulatory framework lists the relevant regulations related to the procedures for providing government support and government guarantee.

Key Clauses Related to Public–Private Partnership Agreements

Presidential Regulation No. 38 of 2015 requires the inclusion of certain provisions in any PPP agreement between the GCA and SPC. Some of the requirements are listed as follows:

- **Performance security.** The SPC needs to provide performance security when signing of the agreement. It is stipulated that amount of performance security will be a maximum of 5% of the investment value of the PPP project.
- **Transfer of ownership.** While the detailed guidelines regarding ownership transfers are unavailable (there are no model documents), the Regulation stipulates that the transfer of shares of the SPC before the date when commercial operations begin is restricted: only possible upon prior approval based on the criteria established by the government minister or by the head of the relevant institution, regional government, SOE, or regional government-owned enterprise (ROE).

- **Other requirements.** Further, the Regulation also stipulates that the agreement shall at the minimum include (this list is not exhaustive):
  - a dispute-resolution mechanism arranged in stages: deliberation and consensus, mediation, and arbitration or court;
  - mechanism for monitoring the performance of the implementing business entity in procurement implementation;
  - "step-in" mechanism for the government and lenders; and
  - a mechanism for handling changes in the scope scenario.[9]

The government has put in place fiscal limits on guarantees for infrastructure projects; it also publishes periodic reports on project exposure, the limits on available guarantees, and on the projects to which the guarantees have been extended. The maximum guarantee limit (MGL) for 2018–2021 is the maximum new guarantees the government may give for proposed infrastructure projects during that period. Ministry of Finance (MOF) Decree No. 884/KMK.08/2017 on the Medium-Term Debt Management Strategy 2018–2021 has set the MGL at 6% of the GDP in 2021, assuming a GDP in 2021 of Rp19,635 trillion ($1.31 trillion). A snapshot of the MGL and status of government guarantees as of end of 2019 is shown in Figure 13.

Figure 13: The Status of Government Guarantees for Infrastructure Projects, 2019 (Rp)

MGL for 2018–2021	MGL Realization as of Q4 2019	Guarantee Commitment until Q4 2019 to GDP	Guarantee Outstanding until Q4 2019 to GDP	Government Guarantee Fund Reserve Account Balance	Guarantee Claim until Q3 2019
• 6% of GDP in 2021	• 0.57% (Rp112.16 trillion)	• 2.74% (Rp442.42 trillion)	• 1.44% (Rp231.99 trillion)	• Rp4.25 billion	• Rp0.00

GDP = gross domestic product, MGL = maximum guarantee limit, Rp = Indonesian rupiah.

Source: https://www.djppr.kemenkeu.go.id/site/home.

Parameter	Response
Does the law specifically enable lenders the following rights:	
– Security over the project assets	✓
– Security over the land on which they are built (land use right)	✓
– Security over the shares of a PPP project company	✓
– Can there be a direct agreement between the government and lenders?	✓
– Do lenders get priority in the case of insolvency?	✓
– Can lenders be given step-in rights?	✓

✓ = Yes.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

9 Government of Indonesia, Presidential Regulation No. 38 of 2015.

Bank loans are usually fully secured and have recourse to project assets in the event of default. The types of security commonly used for project finance include

- security rights to land and goods related to land (including buildings, plants, etc.) and that are an inseparable part of the land, for instance *hak tanggungan* (mortgage rights);
- fiduciary security (non-possessory security rights, usually established for receivables, shares, insurance, claims, and inventory); and
- pledges (possessory security rights, usually established for shares, bank accounts, and time deposits).[10]

In addition to these types of security for project financing, which are acknowledged under Indonesian law, it is common for the lenders to require the project company to enter into a conditional novation and/or assignment that would only come into effect if certain conditions apply, or if the borrower's present and future rights and obligations regarding the project are not assigned under any other security agreement.

Parameter	
Does the law specifically enable compensation payment to the private partner in case of early termination due to:	
– Public sector default or termination for reasons of public interest	✓
– Private sector default	✓
– Force majeure	✓
– Does the law enable the concept of economic/financial equilibrium?	✓
Does the law enable compensation payment to the private partner due to:	
– Material adverse government action	✓
– Force majeure	✓
– Change in law	✓

✓ = Yes.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

PPP regulations (both old and new) require that PPP contracts include a procedure for determining the grounds for and the consequences of termination or force majeure, as well as a mechanism for allowing variations. However, there are no standard compensation clauses, as there are no model concession documents available. And there is still no clear, standardized system for compensating the private sector partner for unilateral changes by the government during or after the bidding (i.e., before the project reaches financial close), save for energy-generation projects involving independent power producers (IPPs), for which the provisions for termination and rights for compensation (e.g., price adjustments) are regulated under the Ministry of Energy and Mineral Resources (MEMR) Regulation No. 10 of 2017, as lastly amended by MEMR Regulation No. 10 of 2018 (on the principles of power purchase agreements). In addition, for all sectors, a compensation mechanism could be provided to private sector partners through government guarantees (footnote 3).

[10] Chambers and Partners. Project Finance 2019 Second Edition: Indonesia. https://practiceguides.chambers.com/practice-guides/project-finance-2019-second-edition/indonesia.

7. Unsolicited Public–Private Partnership Proposals

Parameter	Response
Does the PPP legal and regulatory framework allow submission and acceptance of unsolicited proposals?	✓
What are the advantages of an unsolicited bid for the project proponent? • Competitive advantage at bid evaluation? • Swiss challenge? • Compensation of the project development costs? • Government support for land acquisition and resettlement cost? • Government support in the form of VGF and guarantees?	 ✓ (an additional 10% for its bidding evaluation score) ✓ ✓ ✓ ✓

GCA = government contracting agency, PPP = public–private partnership, VGF = viability gap fund.

✓ = Yes.

The PPP Regulation No. 38 of 2015 states that infrastructure provision may be initiated by a business entity (i.e., unsolicited project proposals) if three major requirements are met: (i) technically, the proposal is integrated with the master plan of the sector concerned; (ii) the project is economically and financially feasible; and (iii) the business entity that proposes the initiative has the capability to finance the project.

When an unsolicited proposal is submitted, a value-for-money (VFM) evaluation and a competitive bidding process are carried out to achieve the highest value from the project. Three major incentives for the private entities to submit unsolicited project proposals are

- the addition of 10% to the procurement score;
- the right to match the offer of the highest bidder, based on the results of the assessment during the tender process; and
- the ability of the GCA to purchase the PPP project.

Chapter V of National Planning and Development Minister Regulation No. 4 of 2015 defines and elaborates on the process for handling unsolicited proposals. Unsolicited proposals are eligible to receive government guarantees as per the relevant laws and regulations.

8. Foreign Investor Participation Restrictions

Parameter	Response
Is there any restriction for foreign investors on:	
– Land use/ownership rights as opposed to similar rights of local investors	✓
– Currency conversion	✓
PPP Projects with foreign sponsor participation (number)	72

PPP = public–private partnership.

✓ = Yes.

Indonesia's regulations prevent foreigners and foreign-owned companies from owning land in the country. Indonesian Agrarian Law of 1960 only allows a foreigner "domiciled in Indonesia" to hold a right-to-use land title (called "Hak Pakai") as well as other forms of land title. For the state-owned land, the building rights ("Hak Guna Bangunan") can be granted for a maximum period of 50 years (30 years plus a 20-year extension). A limited liability company with foreign ownership could also obtain Hak Pakai for land that may extend up to 70 years.

Law No. 7 of 2011 and Bank Indonesia Regulation No. 17/3/PBI/2015 both mandate that the Indonesian rupiah must be used in all transactions in Indonesia. Consequently, the project company will receive payment in that currency.

For foreign investors, Law No. 25 of 2007 ("Investment Law") requires that foreign direct capital investments in Indonesia be implemented through the establishment of a limited liability company (usually referred to as a "PT PMA," with "PMA" standing for "Penanaman Modal Asing," or "foreign capital investment") or of other entities allowed under relevant Indonesian laws and regulations.

From an infrastructure finance perspective, it is important to note the provisions of the law that do not disallow the granting of security for real estate to foreign lenders or restrict repayments to foreign lenders under a security document or loan agreement. Article 10 (1) of the Indonesian Mortgage Law provides that a loan agreement or other agreement used as a mortgage can be signed overseas, and the associated parties can also be a foreign individual or entity, as long as the loan is used for a development within the territory of the Republic of Indonesia.

In addition to the above, restrictions in terms of a negative list of investments and employment conditions are applicable to foreign entities investing in Indonesia. Presidential Regulation No. 44 of 2016, regarding negative list of investments, and the Decree of the Minister of Manpower No. 28 of 2019 include sections on regulations related to these aspects.

Article 13 of Ministry of National Development Planning (BKPM) Regulation No. 14 of 2015 provides the minimum foreign investment capitalization to be fulfilled, as follows:

- The total investment value must be more than Rp10 billion.
- The amount of paid-up capital must be a minimum of Rp2.5 billion.
- Each shareholder is required to contribute a minimum of Rp10 million, and the percentage of share ownership shall be calculated according to the share value.

9. Dispute Resolution

PPP regulations (both old and new) prescribe that PPP contracts determine the dispute-resolution mechanism. However, there are no standard dispute-resolution procedures for PPPs, as there are no model concession documents available. Most contractual disputes for "less-than-termination" events are resolved through negotiation. If unresolved, domestic or international arbitration is called for, commonly with the Singapore International Arbitration Centre (footnote 3).

Parameter	Response
Does the Country have a dispute resolution tribunal (DRT)?	✓
Does the Country have an Institutional Arbitration Mechanism?	✓
Can a foreign law be chosen to govern PPP contracts?	×
What dispute resolution mechanisms are available for PPP agreements?	
– Court litigation	✓
– Local arbitration	✓
– International arbitration	✓
Has the country signed New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards?	✓

PPP = public–private partnership.

✓ = Yes, × = No.

[a] A.F.M. Gerungan et al. 2019. Dispute Resolution in Indonesia. *Lexology*. 25 July. https://www.lexology.com/library/detail.aspx?g=670eb9ea-e083-439a-9518-e75e42cf1ad5.

[b] T. Sukirno and B. Sihombing. 2019. Arbitration Procedures and Practice in Indonesia: Overview. *Thomson Reuters Practical Law*. 1 October. https://uk.practicallaw.thomsonreuters.com/9-520-8397?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1.

Arbitration in Indonesia is governed by Law No. 30 of 1999 on Arbitration and Alternative Dispute Resolution. The law defines arbitration as a method of settling a civil dispute outside the general court, based on an arbitration agreement made in writing by the disputing parties.[11]

Indonesia has ratified the New York Convention. However, for foreign arbitral awards to be recognized and enforced within the jurisdiction of the Republic of Indonesia, such awards must satisfy the following requirements:

- The awards are rendered by an arbitration body or by an arbitrator in a country that is bilaterally bound to Indonesia or jointly bound with Indonesia by an international convention on the recognition and enforcement of foreign arbitral awards. Its enforcement is based on the principle of reciprocity.
- Foreign arbitral awards are limited to those who, according to Indonesian law, fall within the scope of its commercial law.
- Foreign arbitral awards do not contravene public order.
- Foreign arbitral awards may be enforced in the Republic of Indonesia after an exequatur (writ of execution) has been obtained from the chairman of the Central Jakarta District Court (footnote 3).

Further, the provisions according to which the parties can bring a dispute either to the courts or to arbitration are open to different interpretations, which may have a bearing on the effectiveness of the provisions. There have been cases in which Indonesian courts decided that an arbitration provision would prevail when there was uncertainty as to which forum, arbitration or the court, would apply in a particular dispute (footnote 3).

[11] T. Sukirno and B. Sihombing. 2019. Arbitration Procedures and Practice in Indonesia: Overview. *Thomson Reuters Practical Law*. 1 October. https://uk.practicallaw.thomsonreuters.com/9-520-8397?transitionType=Default&contextData=(sc.Default)&firstPage=true&bhcp=1.

10. Environmental and Social Issues

Parameter	Response
Is there a local regulation establishing a process for environmental impact assessment?	✓
Is there a legal mechanism for the private partner to limit environmental liability for what is outside of its control or caused by third parties?	✓
Is there a local regulation establishing a process for social impact assessment?	✓
Is there involuntary land clearance for PPP projects?	✓

PPP = public–private partnership.

✓ = Yes.

The minister of the environment and forestry has issued Regulation No. 38 of 2019, which defines the types of planned businesses and/or planned activities requiring an environmental impact analysis. This regulation replaced Regulation No. 05 of 2012. It provides a specific list of businesses and activities that must submit an AMDAL ("List of Activities") in several sectors, such as in construction, water utilization, reclamation, activities involving hazardous and toxic waste (B3), electric power, new and renewable energy, ports, and mining. AMDALs, as per the Regulation, fall into three categories (A, B, and C) according to their complexity, impact on the environment, location sensitivity, and environmental capacity. Moreover, the Regulation defines the timeline within which the AMDAL preparation has to be undertaken.[12]

For social issues, the other relevant laws are: Law No. 2 of 2012, Presidential Regulation No. 71 of 2012 on the Acquisition of Land for Development in the Public Interest, and Presidential Regulation No. 40 of 2014 on Changes to Presidential Regulation No. 71 of 2012.

11. Land Rights

Parameter	Response
Which of the following is permitted to the private partner:	
– Transfer land lease/use/ownership rights to third party	✓
– Use leased/owned land as collateral	✓
– Mortgage leased/owned land	✓
Is there a legal mechanism for granting wayleave rights, for example, laying water pipes or fibre cables over land occupied by persons other than the government or the private partner?	✓
Is there a land registry/cadastre with public information on land plots?	✓

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12 Coventus Law. Indonesia – New Regulation on the Types of Planned Businesses and/or Activities which Require an Environmental Impact Assessment. www.conventuslaw.com/report/indonesia-new-regulation-on-the-types-of-planned/.

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Parameter	Response
Which of the following information on land plots is available to the private partner:	
– Appraisal of land value	✓
– Landowners	✓
– Land boundaries	✓
– Utility connections	✓
– Immovable property on land	✓
– Plots classification	✓

✓ = Yes.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

The key regulations pertaining to land, land use, and land acquisition include:

- fundamental regulations concerning the Indonesian agrarian framework under Law No. 5 of 1960 on the Basic Agrarian Law, which is currently being amended;
- Government Regulation No. 40 of 1996 on the Right to Cultivate, Right to Build, and Right to Use Land;
- Law No. 2 of 2012 on the Acquisition of Land for Development in the Public Interest;
- Presidential Regulation No. 71 of 2012 (recently amended by Presidential Regulation No. 148 of 2015); and the
- Regulation of National Land Agency No. 5 of 2012.

Law No. 2 of 2012 holds that land procurement for the public interest shall be conducted by the government in line with regional spatial layout plans, regional development plans, strategic plans, and working plans; and that it will be done with adequate and fair compensation. Its implementing regulation, Presidential Regulation No. 71 of 2012, provides the maximum duration for land acquisition at an estimated 512 working days (footnote 3). According to Presidential Regulation No. 38 of 2015, land acquisition for PPP projects that are listed as national strategic projects should be funded by the State Revenue and Expenditure Budget (APBN) and/or the Regional Revenue and Expenditure Budget (APBD).

The compensation amount shall be determined by an independent appraiser. Although a national strategic PPP project should be financed from the national budget and/or regional budget, if it is financially feasible, the project company may pay back some or the entire cost of the land acquisition (according to Presidential Regulation No. 38 of 2015) (footnote 3). The private sector partner may also finance the land procurement using its own funds, and then seek reimbursement from the government once the land acquisition completed.

In 2017, the Ministry of Finance introduced a land acquisition scheme for national strategic infrastructure PPP projects through the State Asset Management Agency (LMAN). The agency is required to provide land funds for these projects to guarantee timely procurement and boost private infrastructure investment.

The types of titles that can be acquired and the parties who are permitted to acquire each of the titles are indicated as follows:

- Right of Ownership (*Hak Milik*)—Indonesian individuals and specific Indonesian institutions;
- Right to Build (*Hak Guna Bangunan*, or HGB)—Indonesian individuals and Indonesian companies;
- Right to Cultivate (*Hak Guna Usaha*, or HGU)—Indonesian individuals and Indonesian companies;
- Right to Use (*Hak Pakai*)—Indonesian individuals, Indonesian companies, governmental institutions, religious and social agencies, diplomatic offices, international agencies, foreign representative offices and foreign citizens;
- Right to Manage (*Hak Pengelolaan*)—government institutions (including regional governments, state-owned business entities, regional government-owned business entities, PT Persero, *badan otorita* [authority bodies], and other government legal entities designated by the government);
- Right of Ownership over Stacked Units (*Hak Milik Atas Satuan Rumah Susun*, or HMSRS)—parties who are entitled to hold the land title on which a building is erected; and
- Lease (*Hak Sewa*)—Indonesian individuals, Indonesian companies, and foreign parties.[13]

Building rights may be granted by the state for a total of 50 years: 30 years extendible by another 20, or a total of 50 years divided between two entities when a foreign entity applies simultaneously. These building rights shall be in accordance with city planning.

Further, there are no express legal restrictions on the length of leaseholds in Indonesia. In principle, the lessor (if not the government) and the tenant may freely negotiate the terms of the lease. By virtue of the same, as long as the foreign entity has the domicile in Indonesia, the terms of lease could be determined on a case-by-case basis.

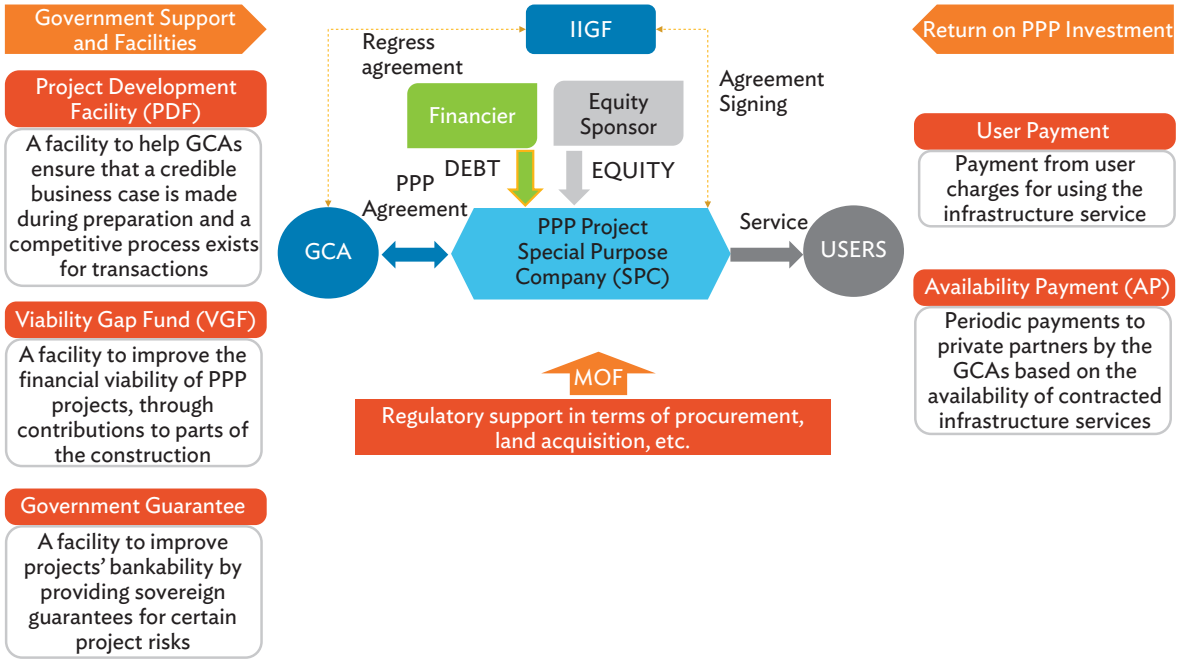
Government Support for Public–Private Partnership Projects

The government has taken various initiatives to support infrastructure development under the PPP scheme, such as PDF, VGF, government guarantee and regulatory support in procurement and land acquisition. The government also provides the availability payment mechanism that gives investment repayment certainty for private investors.

[13] SEKK: Indonesian Legal Consultants. Indonesia Law Blog. Categories of Property Rights in Indonesia. https://www.ssek.com/id/blog/categories-of-property-rights-in-indonesia.

Figure 14: Overview of the Government Support Facilities and Returns on Public–Private Partnership Investments

Government support and facilities, and return on PPP–KPBU investment



GCA = government contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund, KPBU = cooperation between the government and business entities in infrastructure provision, MOF = Ministry of Finance, PDF = project development facility, PPP = public–private partnership, SPC = special purpose company, VGF = viability gap fund.

Note: This figure reflects KPBU PPP projects under Presidential Regulation No. 38 of 2015.

Source: Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

Parameter	
Project Funding Support	
Is there a dedicated government financial support mechanism for PPP projects?	✓
What are the instruments of government financial support available under this government financial support mechanism?	
• Capital grant	✓
• Operations Grant	✓
• Annuity/availability payments	✓
• Guarantees to cover	
• Currency inconvertibility and transfer risk	✓
• Foreign exchange risk	✓

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Parameter	
• War and civil disturbance risk	✓
• Breach of contract risk	✓
• Regulatory risk	✓
• Expropriation risk	✓
• Government payment obligation risk	✓
• Credit risk	✓
• Minimum demand/revenue risk	✓
• Risk of making annuity/availability payments in a timely manner	✓[a]
What are the caps/ceilings for the government financial support under each of the abovementioned government financial support instruments?	(i) VGF, with a maximum of 49% of project cost (ii) Maximum guarantee limited to 6% of GDP during 2018–2021
Is there a minimum PPP project size (investment) for a PPP project to be eligible for receiving government financial support?	For the VGF, total investment at least Rp100 billion
Are there minimum financial commitment requirements for the private developer equity before the government support could be drawn?	At least 20% of the equity
Is the government financial support required, and an allowed bid parameter for PPP projects?	✓
Are unsolicited PPP proposals eligible to receive government financial support?	×
Are there standard operating procedures for providing government financial support to PPP projects?	
• Appraisal and approval process	✓
• Budgeting process	✓
• Disbursement process	✓
• Monitoring process	✓
• Accounting, auditing, and reporting process	(not clear if auditing processes are available)
Who are the signatories to the Government Financial Support Agreement?	GCA, IIGF and SPC (for guarantees) GCA, MOF, and SPC (for VGF)[b]
Who is responsible for monitoring the performance of PPP projects availing government financial support?	
• Independent engineer?	✓ (independent consultants)
• Government agency?	✓ (PJPK)
• Ministry of Finance?	(MOF Feasibility Support Committee)
What are the other forms of government support available for PPP projects?	
• Land acquisition funding support?	✓

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Parameter	
• Funding support for resettlement and rehabilitation of affected parties?	✓
• Tax holidays/exemptions?	✓
• Real estate development rights?	UA
• Advertising and marketing rights?	UA
• Interest rate/cost of debt subventions?	UA
• Other subsidies and subventions?	UA
Can the other forms of government support be availed over and above the government financial support through various instruments listed above?	✓ (schemes offered by PT SMI and PT IIF)

GCA= government contracting agency, GDP = gross domestic product, IIGF = Indonesia Infrastructure Guarantee Fund, MOF = Ministry of Finance, PJPK = government institution responsible for a PPP project, PPP = public–private partnership, PT IIF = Indonesia Infrastructure Finance, PT SMI = PT Sarana Multi Infrastruktur (an Indonesian State-Owned Infrastructure Financing Company), SPC = special purpose company, VGF = viability gap fund.

✓ = Yes, × = No, UA = Unavailable.

[a] Indonesia Infrastructure Guarantee Fund (IIGF). 2018. *Risk Allocation Guideline: Public Private Partnership (PPP) in Indonesia*. Jakarta. https://ptpii.co.id/iigf-institute2.

[b] Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download; IIGF, *Risk Allocation Guideline.*

[c] BAPPENAS. 2019. *Accelerating Indonesia's Infrastructure through Public Private Partnership. Indonesia.* Presentation. https://ppp.gov.ph/wp-content/uploads/2019/08/UNESCAP_2ndMTNG_Session1-INDONESIA.pdf. Jakarta, Indonesia.

Viability Gap Fund

A report published in 2019 by the Singapore-based organization Asia-Pacific Economic Cooperation (APEC), *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*, describes the VGF framework in Indonesia. The report states:

In 2012, under Minister of Finance Regulation No. 223/PMK.011/2012 the government introduced VGF assistance for infrastructure projects. VGF is a government support in the form of a partial contribution, up to a maximum of 49 percent of the construction, equipment and installation costs of an infrastructure PPP project that has reached economic viability but not financial viability. VGF is provided as the last resort if there is no alternative that will make the project financially viable. It would only be given to infrastructure projects that are unable to deliver large profits or with too long a turnaround time to attract investors to participate in the tender.... VGF does not include costs related to land acquisition and tax incentives (footnote 4).

The report then lists the conditions for eligibility for VGF support, among them:

- The project has met the economic viability but not the financial feasibility criteria.
- The project implements the user pay principle.
- It has a total investment cost of not less than Rp100 billion.
- It is held by a project company that obtained it through an open and competitive bidding process (footnote 4).

The report also specifies the benefits offered by the VGF, as follows:

- It reduces the project cost to be borne by private parties.
- It increases the financial feasibility of PPP–KPBU ("cooperation between the government and business entities in infrastructure provision") projects, thus attracting the interest and participation of the private sector.
- It increases the certainty with which a project company can engage in procurement in accordance to quality standards and the planned timeline.
- It allows for the delivery of a public service at an affordable tariff for the community (footnote 4).

Article 14 of Minister of Finance Regulation No. 223 of 2012 states, "The amount of VGF support approved by the Minister of Finance shall be the only financial parameter in determining the awardee business entity."

Further, Article 20 stipulates the following with regard to the disbursement of VGF funding:

- The disbursement of the first installment of VGF support may be made only if the following conditions are met:
  - At least 20% of the equity has been used by the business entity signing the PPP agreement to finance the construction of the PPP project.
  - The first disbursement of loans to the business entity signing the PPP agreement has been made by the lender.
- The disbursement amount of the next installment of VGF support is in proportion to the amount of the second loan disbursement by the lender.

Government Guarantees

In the APEC report there is a description of the guarantees provided by the Indonesian government:

To mitigate government-related financial risk, the government provides guarantee assistance through the IIGF established in 2009. The IIGF acts as a guarantor for the various infrastructure risks stemming from government inaction that could result in financial losses for PPP infrastructure projects, including, for example, license delays, financial close termination or delays, amendments to legislation and regulatory provisions, or changes to tariff structure. The IIGF guarantees the financial obligations of the government contracting agency (GCA) by paying compensation to business entities when infrastructure risks arise in accordance with the allocation agreed in the PPP–KPBU agreement. The infrastructure guarantee is implemented by the IIGF as a single-window policy. If the coverage needs of a guarantee exceed the capacity of the IIGF, there may be a co-guarantee between the Ministry of Finance and the IIGF (footnote 4).

The report also presents the following list of conditions that a PPP–KPBU project must meet to be eligible for the guarantee:

- The project complies with the rules stated in Presidential Regulation No. 38 of 2015.
- It complies with the sectoral regulations and the project was awarded through a transparent and competitive bidding process.
- It is feasible in terms of technical, economic, legal and environmental aspects and has no negative impact on social aspects.

- The feasibility study has been performed using the services of an independent and professional consultant.
- There are binding arbitration provisions in the PPP agreement (footnote 4).

Land Acquisition Fund

The APEC report also covers the Land Acquisition Fund framework in Indonesia, stating:

- In Indonesia, land acquisition is an obligation of the GCA, and Presidential Regulation no. 30 of 2015 which allows investors to prefinance land acquisition and later recovered by the government. In 2017, the Ministry of Finance introduced a land acquisition scheme for national strategic infrastructure PPP projects through LMAN. The agency is required to provide land funds for these projects to guarantee timely procurement to boost private infrastructure investment.
- According to Presidential Regulation No. 38 of 2015, the source of funding for land acquisition for PPP projects that are listed as PSNs are the State Revenue and Expenditure Budget (APBN) and/or the Regional Revenue and Expenditure Budget (APBD). If the GCA is an SOE, or an enterprise owned by a regional government (ROE), the source of funding for land acquisition will be from the budget of the SOE or from the business entity through cooperation with the concerned SOE. If a PPP–KPBU is financially feasible, the implementing business entity may repay in part or in full the cost of the land acquisition that had been carried out by the government (footnote 4).

Availability Payment

The report describes the availability payment as "a new mechanism that expands the types of return on PPP-KPBU investments," and explains the mechanism as follows:

The availability payment is made from the GCA to the SPC as a reward for ensuring the availability of the facility and for providing specified services under a PPP–KPBU contract. The availability payment is a fixed amount and is paid throughout the operation period, with a possible deduction in case the SPC fails to fulfill certain requirements. The availability payment essentially covers all costs (construction, operation and maintenance, project financing, etc.) and also the return for investors (footnote 4).

The availability–payment mechanism is guided by Ministry of Finance (MOF) Regulation No. 260/PMK.08/2016 and Ministry of Home Affairs (MOHA) Regulation No. 96 of 2016.

Other Financial Incentives

Indonesia has regulations on financial incentives such as tax holidays, tax allowances, and import duty facilities. MOF Regulation No.35 of 2018 provides for (i) 5–15 year tax exemptions, with a potential 20-year exemption for projects that are considered strategic for Indonesia's economy; and (ii) up to a 100% reduction on taxes for businesses in 17 eligible industries. Government Regulation No. 9 of 2016 allows a reduction in the corporate net income tax for 6 years equivalent to 30% of investment value, including 5% each year for various eligible segments. And MOF Regulation No. 176/PMK.011/2009 has provisions for exemptions from import duties for eligible cases.[14]

[14] BAPPENAS. 2019. *Accelerating Indonesia's Infrastructure through Public Private Partnership.* Indonesia. Presentation. https://ppp.gov.ph/wp-content/uploads/2019/08/UNESCAP_2ndMTNG_Session1-INDONESIA.pdf. Jakarta, Indonesia.

Nongovernment Equity Financing

The website of the Ministry of National Development Planning (BAPPENAS) describes its facilitation scheme for equity financing, "Non-Government Budget Equity Financing" (PINA), as follows:

The Non-Government Budget Equity Financing ("PINA" in Indonesian abbreviation) is a facilitation scheme aimed to accelerate the financial close of national priority projects....PINA Center for Private Investment, a unit under the Ministry of National Development Planning (BAPPENAS) undertakes a strategic role in facilitating the project financing and enable any debottlenecking of financing process for Indonesia's infrastructure development. Founded in 2017, PINA Center for Private Investment successfully facilitated $3.3 billion for 11 projects across sectors by end of 2018. Projects listed in our pipeline are ranging from different sectors such as connectivity, energy, strategic industries and plantations, as well as housing.[15]

The website also states that "PINA offers numbers of alternative financing options to the investors. Three main instruments are Direct Equity, Hybrid and Funds."[16]

Parameter	
Project Development Funding	
What are the various sources of funds for PPP project preparation?	
• Budgetary allocations	✓
• Dedicated project preparation/project development fund	✓
• Technical assistance from multilateral, bilateral, and donor agencies?	✓
• Recovery of project preparation funding from the preferred bidder?	✓
At what stage of the PPP project can the project preparation/development funding be availed by the government agency?	
• Pre-feasibility stage	✓
• Detailed feasibility stage	✓
• Transaction stage	✓
Is there a list of project preparation/project development activities toward which the project development funding can be utilized?	✓
Can the project development funding be utilized to appoint transaction advisors for PPP projects?	✓
Is there a specific process to be followed by government agencies to appoint transaction advisors?	✓
What are the payment mechanisms for making payments to transaction advisors?	
• Timesheet based	✓
• Milestone based	✓
Are there standard agreements and documents to avail project development funding?	✓
Who are the signatories to the project development funding agreements?	GCA and PT SMI or IIGF

GCA = government contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund, PPP = public–private partnership, PT SMI = PT Sarana Multi Infrastruktur (an Indonesian State-Owned Infrastructure Financing Company).

✓ = Yes, UA = Unavailable.

[a] The Ministry of Finance has standard documents and processes for its project development facility scheme.

15 PINA: Center for Private Investment. Our History. http://pina.bappenas.go.id/our-history/.

16 PINA: Center for Private Investment. How We Work: Financing Scheme. http://pina.bappenas.go.id/financing-scheme/.

Project Development Facility

The APEC report and the website of the Directorate General of Budget Financing and Risk Management (under the MOF) both provide details about the project development facility (PDF), which is a facility provided to a GCA to assist with PPP project preparation and transaction. Note that the MOF manages the PDF through the Directorate. The APEC report states:

To develop the required documentation standards and studies for the preparation and the implementation of PPP–KPBU project transactions, particularly the pre-feasibility study and the PPP agreement design documents, the government provides support through the PDF. The primary function of the PDF is to help the GCA increase the effectiveness of the preparation and/or implementation of PPP project transactions, to meet the specified quality and time. The PDF encompasses several types of facilities:

- *Project preparation facility*
  - Preparation of the pre-feasibility study (to assess the feasibility of a PPP by considering at the minimum the legal, technical, economic, financial, risk management, environmental and social aspects)
  - Preparation of all studies and documents supporting the pre-feasibility study
- *Transaction assistance facility*
  - Procurement of implementing business entities
  - PPP agreement signing
  - Financing for the PPP project (financial close) as long as it is part of the responsibility allocated to the GCA based on the PPP agreement
- *Combined project preparation and transaction assistance facilities.* The scope consists of a combination of the two types of facilities (Italics in the original) (footnote 4)

According to the report, the project criteria for the PDF are: (i) the project must be included in the Priority PPP project list, (ii) the project must concern PPP project development and/or the development of domestic oil refineries, and (iii) the project must meet the other criteria stipulated in the relevant Ministry of Finance regulations (see below) (footnote 4).

The Directorate website says that the legal basis for the PDF consists of the following:

- Presidential Decree Number 75 Number 75 of 2014 about Acceleration of Provision of Priority Infrastructure,
- Presidential Decree Number 122 of 2016 about Amendment to Presidential Regulation Number 75 of 2014 about Acceleration of Provision of Priority Infrastructure,
- Ministry of Finance of Regulation Number 73/PMK.08/2018 about Facilities for the Preparation and Implementation of Transactions of Government Cooperation Projects with Business Entities in the Provision of Infrastructure, and
- Ministry of Finance Regulation Number 129/PMK.011/2016 about Amendment to Minister of Finance Regulation Number 265/PMK.08/2015.[17]

[17] Government of Indonesia, MOF, Directorate General of Budget Financing and Risk Management. Project Development Facility. http://kpbu.djppr.kemenkeu.go.id/en/project-development-facility/.

Figure 15 shows the process adopted by the MOF for approving requests submitted to the PDF from GCAs.

Figure 15: The Approval Process for Requests to the Project Development Facility

DGBFRM = Directorate General of Budget Financing and Risk Management, PDPPI = Directorate of Government Support and Infrastructure Financing Management, GCA = government contracting agency, MOF = Ministry of Finance, PDF = project development facility, PPP = public–private partnership.

Source: Government of Indonesia, Ministry of Finance, Directorate General of Budget Financing and Risk Management. Project Development Facility. http://kpbu.djppr.kemenkeu.go.id/en/project-development-facility/.

Maturity of the Public–Private Partnership Market

Parameter	Response
PPP Project Statistics	
Is there a national PPP database for the country?	✓[a]
Are any data available on the distribution of PPP projects across infrastructure sectors? • Transport? • Energy? • Water? • Municipal solid waste? • Social infrastructure? • ICT?	× × × × × ×
Are any data available on the distribution of PPP projects across the stages of the project life cycle?[b] • Pre-feasibility and/or preliminary assessment stage? • Full feasibility assessment stage? • Transaction stage? • Commercial close? • Financial close?	✓[a]

ICT = information and communication technology, PPP = public–private partnership.

✓ = Yes, × = No.

[a] There is no single consolidated database that serves as the PPP database for the country. The Asian Development Bank (ADB) is working to create a national project database. There are multiple lists maintained by different entities such as the Ministry of Finance and the Ministry of National Development Planning (BAPPENAS).

Sources: Government of Indonesia, BAPPENAS. 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019.* Jakarta. https://library.pppknowledgelab.org/documents/5826/download.

The Directorate of Government Support and Infrastructure Financing Management (PDPPI), within the Directorate General of Budget Financing and Risk Management, maintains a list of PPP projects indicating where they are in the stages of a project life cycle: the preparation stage, auction stage, financing acquisition stage, construction stage, and operational stage. But this list is not comprehensive.[18]

Parameter	Response
Does the country publish a national PPP project pipeline?	✓
At what frequency is the national PPP project pipeline report published?	Annually
Is the national PPP project pipeline based on the national infrastructure plan?	✓

PPP = public–private partnership

✓ = Yes.

Public–Private Partnership Book

In compliance with BAPPENAS Regulation No. 4 of 2015, the ministry publishes *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*, also known as the "PPP Book," on an annual basis. The publication provides the information on PPP infrastructure projects in the country that are open to potential investors or any other PPP stakeholders. The projects listed in the book have been reviewed by BAPPENAS, and they are organized into two categories based on their readiness level: "under preparation" and "ready to offer." However, the PPP Book also provides information on projects that have entered into transaction stage (tender process, already tendered) and covers success stories of PPP projects in Indonesia.[19]

In addition to the PPP Book, the government has identified a list of national strategic projects (PSNs) led by the Committee for Acceleration of Priority Infrastructure Delivery (KPPIP), which was formed under Presidential Regulation No. 75 of 2014. For such priority projects, KPPIP ensures that the projects are prepared in accordance with quality standards it has established, and controls the steps taken to overcome any bottlenecks. Furthermore, KPPIP applies incentive–disincentive schemes to follow up on project-monitoring results, so that all relevant parties are encouraged to accelerate the delivery of the priority projects. As of end of 2019, KPPIP was responsible for overseeing 37 priority projects at various stages of development across eight sectors.[20]

Parameter	Response
Who are the typical entities financing PPP projects in Indonesia?	
• Private developers?	✓
• Construction contractors?	UA
• Institutional, financial, and private equity investors?	✓
• Pension funds?	✓ (indirectly by purchase of bonds)
• Insurance companies?	UA

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[18] Government of Indonesia, MOF, Directorate General of Budget Financing and Risk Management. Project Profile. http://kpbu.djppr.kemenkeu.go.id/en/project-profile/.

[19] BAPPENAS, *Public–Private Partnership Book 2019*. https://library.pppknowledgelab.org/documents/5826/download; Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP). Latest Status of the KPPIP Priority Projects. https://kppip.go.id/en/priority-projects/.

[20] KPPIP, Latest Status of the KPPIP Priority Projects, https://kppip.go.id/en/priority-projects/.

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Parameter	Response
• Banks?	✓
• NBFCs and financial institutions?	✓
• Donor agencies?	✓
• Government agencies and SOEs	✓
What is the distribution of financing among the entities financing PPP projects?	UA
Does the country have a history or track record of issuing bonds for infrastructure projects?	✓
Have any infrastructure projects and/or private developers of infrastructure projects raised funding through bond issuances?	×
What is the total value of funding raised through capital markets by PPPs?	UA
Does the country have a matured derivatives market to hedge certain risks associated with PPPs?	UA
Does the country have a national development bank?	×
Does the country have credit rating agencies to rate infrastructure projects?	✓
What are the credit ratings typically achieved or received by infrastructure projects?	UA
Is there a threshold credit rating for infrastructure PPPs below which institutional investors, pension funds, and insurance companies would not invest in infrastructure PPPs?	UA
What is the typical funding model for infrastructure PPPs—corporate finance or project finance?	UA
Are there regulatory limits or other restrictions regarding the maximum exposure of banks to infrastructure projects?	UA

NBFC = non-banking financial corporation, PPP = public–private partnership, SOE = state-owned enterprise.

✓ = Yes, × = No, NA = Not Applicable, UA = Unavailable

The government attracts private sector participation in PPP projects by offering two options for project financing:

- PPP projects offering an internal rate of return (IRR) that is higher than 13% use the PINA scheme.
- PPP projects offering an IRR that is lower than 13% use a PPP–KPBU contract with a government-support or government-guarantee scheme (footnote 4).

According to *Promoting the Use of Capital Markets for Infrastructure Financing*, a report published in 2017 by the World Bank Group, infrastructure financing in Indonesia has largely been provided by banks, primarily international banks based in the People's Republic of China (PRC) and Japan. There is little financing from capital markets specialized in the development of new infrastructure. Further, the report says that bonds for individual projects are unavailable partly because of the lack of a credit culture among domestic investors. The bond market is limited to plain vanilla corporate bonds issued by large utilities and construction companies, mostly by SOEs. The report also states that, as of 2017, the infrastructure sector accounted for about 13% of the corporate bond market, and that this market was the most straightforward means for financing infrastructure in Indonesia.[21]

The PPP and infrastructure sectors have only recently started opening up to structured products. Dana Investasi Infrastruktur (DINFRA) is the only fund devoted to infrastructure project financing that is registered with Indonesia's Financial Services Authority (OJK).[22]

[21] World Bank Group. 2017. *Promoting the Use of Capital Markets for Infrastructure Financing: Lessons for Securities Markets Regulators in Emerging Market Economies.* Washington, DC. http://documents.worldbank.org/curated/en/672231533669107669/pdf/129287-WP-PUBLIC-PromotingtheUseofCapitalMarketsforInfrastructureFinancing.pdf.

[22] PT Jasa Marga (Persero). DINFRA: An Alternative Funding and Solution for National Infrastructure. News release. 15 April. *https://www.jasamarga.com/public/en/activity/detailactivity.aspx?title=%E2%80%8BDINFRA:%20An%20Alternative%20Funding%20and%20Solution%20for%20National%20Infrastructure.*

Under OJK Regulation No. 3 of 2015, pension funds are not allowed to invest directly in infrastructure projects; they may only participate in infrastructure investment through bond purchases issued by SOEs. However, international pension funds can participate in special purpose companies (SPCs) involved in PPP projects through direct equity investment. For example, the Canada Pension Plan Investment Board agreed in 2019 to buy a stake in a private toll road operator in Indonesia.[23]

Based on the National Financial Market Development and Deepening Strategy (SN-PPPK), there were nine financing instruments that have potential as instruments for infrastructure financing, such as asset-backed securities; mandatory convertible bonds and green bonds; and *Shari'a*-based financing instruments, such as the *waqf*-linked *sukuk*.[24]

Three key institutions involved in different formats of financing or guaranteeing PPP projects include Indonesia Infrastructure Finance (PT IIF), the PT Sarana Multi Infrastruktur (PT SMI), and the Indonesia Infrastructure Guarantee Fund (IIGF). More specifically, PT SMI is fully state-owned project-financing entity, while PT IIF is a private non-banking financial institution with various products for infrastructure:

Indonesia Infrastructure Finance

Below is a list of the products offered by PT IIF, according to its 2019 annual report:

- fund based
  - providing loans in the form of senior loans, subordinated loan or mezzanine financing, bridge financing, take-out financing, or refinancing;
  - financing of other activities related to infrastructure projects to the extent permitted by law; and
  - equity investment.
- non-fund based
  - providing guarantees in the form of standby-financing and/or performance bonds.[25]

Indonesia State-Owned Infrastructure Financing Company

The products offered by PT SMI, according to its 2019 annual report, include:

- senior loans
  - investment and term loans,
  - working capital loans,
  - bridging loans,
  - take-out financing,
  - promotor financing, and
  - *pembiayaan* non-cash loans.

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23 D. Walker. 2019. CPPIB to Make First Infrastructure Investment in Indonesia. Pensions & Investments. 2 September. https://www.pionline.com/pension-funds/cppib-make-first-infrastructure-investment-indonesia.

24 MOF, Bank Indonesia, and OJK. 2010. *National Strategy for Financial Market Development 2018–2024.* Jakarta. https://www.bi.go.id/en/moneter/pasar-keuangan/snpppk/Documents/SNPPPK-BI-EN.pdf. A *waqf* is an Islamic endowment of property to be held in trust and used for charitable or religious purposes or an Islamic religious or charitable foundation created by an endowed trust fund. A sukuk is a Shari'a-compliant financial certificate; it is similar to a conventional bond, except that is involves cash flows from asset monetarization, rather than interest payments.

25 PT IIF. 2019. *2019 Annual Report: Embracing Momentum of Growth through Sustainable Development.* Jakarta. https://iif.co.id/en/investor/financial-informations/annual-reports/.

- subordinated loans
- mezzanine loans
- equity investments
  - direct equity investments, and
  - shareholder loans and bridging loans
- financing services
  - arranger services, and
  - underwriter services
- municipal financing
- sustainable financing, in the form of green bonds, which have been an active instrument employed by PT SMI
- *Shari'a*-based financing
  - *Ijarah Muntahiyyah Bit Tamlik*, financing based on the lease-tenancy principle;
  - *Murabahah*, contract based on the buy-and-sell principle;
  - *Musyarakah Mutanaqisah* (MMQ), funding based on the profit-sharing principle; and
  - *Musyarakah*, contract based on partnership, with each party contributing a share of the funds[26]

Table 7: Various Types of Loans for Public–Private Partnerships

Item	Non-Limited Recourse Loan	Non-Limited Recourse Loan in Local Currency	Project Financing by Local Public Sector Banks	Interest Rate Swaps	Currency Swaps	Project Financing through Project Bond Issuance
Maximum tenure (years)	15–20	15–20	Up to 20	Forward duration of < 5	< 1	
Up-front arrangement fee (bps)	100–450	100–550				
Floor rate	LIBOR	JIBOR				
Margin rate (bps)	300–500	500–600				
Foreign debt as percentage of total debt for project financing (%)			> 50			
Project bonds as percentage of total debt for project financing (%)						< 30%

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26 PT SMI. 2020. *2019 Annual Report: Striving toward Impactful Sustainable Development.* Jakarta. https://ptsmi.co.id/wp-content/uploads/2020/05/AR-PT-SMI-26052020_lowres_compile.pdf.

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Item	Non-Limited Recourse Loan	Non-Limited Recourse Loan in Local Currency	Project Financing by Local Public Sector Banks	Interest Rate Swaps	Currency Swaps	Project Financing through Project Bond Issuance
Typical debt-to-equity ratio	70:30	70:30	75:25			
Time line to financial close (months)			6–12			6–12
Minimum DSCR covenant levels (x)			1.2–1.5			1.2–1.5
Nominal interest rates (%)			13–15			NA
Real interest rates (%)			6–8			NA
Security package	• Lender rights to step-in as a substitute • Charge on assets • Receivables escrow • Waterfall mechanism for project cash flows • Cash deficit reserves (20%–30% of project cost) • Debt service reserves (6 months) • Termination coverage for debt due • Performance bonds 5%–10% for construction • Parent guarantees to backstop project SPV commitments to lenders					

bps = basis points, DSCR = debt service coverage ratio, JIBOR = Jakarta interbank offered rate, LIBOR = London interbank offered rate, SPV = special purpose vehicle, UA = Unavailable.

An empty cell indicates that the column head does not apply.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

Table 8 provides information on the banks that were the most active in project financing in Indonesia from June 2018 to May 2020.

Table 8: The Most Active Banks in Project Finance in Indonesia, June 2018–May 2020

Name	Total Project Financing		Number of Transactions
	($ million)	(Rp trillion)	
JBIC	604.00	8.4	1
BNI	541.93	5.3	4
Bank Mandiri	378.51	5.2	5
ADB	375.00	4.8	3
SMBC	348.73	3.3	3
BRI	238.01	4.1	3

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Name	Total Project Financing		Number of Transactions
	($ million)	(Rp trillion)	
MUFG	293.81	3.0	3
IIF	212.72	2.8	4
Bank Central Asia	201.12	2.4	3
Intesa Sanpaolo	172.21	8.4	1

ADB = Asian Development Bank, BNI = Bank Negara Indonesia, BRI = Bank Rakyat Indonesia, IIF = Indonesia Infrastructure Finance, JBIC = Japan Bank for International Cooperation, MUFG = Mitsubishi UFJ Financial Group, SMBC = Sumitomo Mitsui Banking Corporation.

Source: https://www.inframationnews.com/country-factbook/1447302/indonesia.thtml.

Equity sponsors also play an important role in the development of projects. Table 9 provides information on the most active sponsors in Indonesia from June 2018 to May 2020.

Table 9: The Most Active Equity Sponsors in Indonesia, June 2018–May 2020

Name	Total Project Financing		Number of Transactions
	($ million)	(Rp trillion)	
Marubeni	1,800.00	25.0	1
Sojitz Corporation	1,800.00	25.0	1
Pertamina	1,800.00	25.0	1
Waskita Karya	498.47	6.9	2
Jasa Marga	390.47	5.4	2
Ratchaburi Electricity Generating Holding Public Company Limited	350.00	4.9	1
Medco Energi	350.00	4.9	1
Sinohydro	257.98	3.6	1
PT Toba Bara Sejahtra Tbk	257.98	3.6	1
PT Profesional Telekomunikasi Indonesia (Protelindo)	232.19	3.2	2

PT = Perseroan Terbatas (limited liability company), Tbk = Terbuka (publically listed company).

Source: https://www.inframationnews.com/country-factbook/1447302/indonesia.thtml.

Credit Rating Agencies in Indonesia

In Indonesia, there are three credit rating agencies:

- PT Pemeringkat Efek Indonesia (PEFINDO);
- PT Fitch Ratings Indonesia; and
- PT Kredit Rating Indonesia.[27]

[27] Statistik Perusahaan Pemeringkat Efek Di Otoritas Jasa Keuangan – Direktorat Lembaga Dan Profesi Penunjang Pasar Modal.

III. The Public–Private Partnership Landscape by Sector

ROADS

Parameter	Value	Unit of Measurement
Length of the total road network	476,337	km
Quality of road infrastructure	4.20	1 (lowest)–7 (highest)

km = kilometers.

Source: Trading Economics. Indonesia – Roads, Total Network (km). https://tradingeconomics.com/indonesia/indicators; TheGlobalEconomy.com. Compare Countries with Annual Data from Official Sources. https://www.theglobaleconomy.com/texts_new.php?page=aboutus.

1. Contracting Agencies in the Road Sector

The Indonesia Toll Road Authority (BPJT) is the authorized government agency responsible for the operation of toll roads, which entails regulating, operating, and supervising toll road business entities. BPJT is under the Ministry of Public Works and Housing (MPWH).

There are two other institutions associated with toll roads in Indonesia: Bina Marga and the Toll Road Business Enterprise (BUJT). Bina Marga is directly supervised by the MPWH, and is involved in initiating, preparing, selecting, and evaluating all toll road development plans. BUJT is responsible for planning, building, operating, and maintaining toll road projects. The operation of the toll roads can be carried out by either an SOE or a private entity.

2. Road Sector Laws and Regulations

The existence of BPJT is mandated by Law No. 38 of 2004 on Roads; regulated under Government Regulation No. 15 of 2005 on Toll Roads; and stipulated by Minister of Public Works Regulation No. 295/PRT/M/2005 on the Indonesia Toll Road Authority.

The key sector-specific regulations are

- Law No. 38 of 2004 on Roads;
- Government Regulation No. 15 of 2005 on Toll Roads, as amended by Government Regulation No. 30 of 2017;
- Ministry of Public Works Regulation No. 01/PRT/M/2017 on Guidelines for Procurement of Toll Road Concession;
- Ministry of Public Works Regulation No.16/PRT/M/2014 on Minimum Service Standard Requirements for Toll Roads; and

- Presidential Regulation No. 38 of 2015 on Cooperation Between Government and Business Entities in Procurement of Infrastructure, which introduced the possibility of a performance-based payment mechanism for the toll road PPP sector (footnote 3).

Standard Requirements for Toll Roads

The technical requirements for toll road construction and operation typically follow minimum Indonesian standard requirements and some international standards, such as those of the American Association of State Highway and Transportation Officials, and of the California Department of Transportation, as agreed to by BPJT.

2.1 Foreign Investment Restrictions in the Road Sector

The maximum equity investment allowed for foreign investors in greenfield projects in the roads sector has been 100%, as is shown as follows:

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects	100%	100%	100%

Source: Government of Indonesia, Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

2.2 Standard Contracts in the Road Sector

Type of Contract	Availability
PPP/concession agreement	×
Performance-based operation and maintenance contract	×
Engineering procurement and construction contract	✓

O&M = operation and maintenance, PPP = public–private partnership.

3. Sector Master Plan in the Road Sector

There are no details on the sector master plans for roads available in English. In November 2019, Leonard V.H. Tampubolon, deputy minister for development planning, in a presentation on Indonesia's long-term development plan for 2020–2024 (RPJMN), 2020–2024 mentioned the following projects in the PPP project pipeline. The plan seeks to lay 2,500 kilometers (km) of new toll roads and 3,000 km of new national roads. Some of the road projects are

- Balikpapan–Samarinda Toll Road,
- Balikpapan–Penajam Paser Utara Toll Road,
- Samarinda–Bontang Toll Road,
- Trans-Sumatra Toll Road Development, and
- Trans-Papua Toll Road Development.[28]

[28] L.V.H. Tampubolon. 2019. *Financing for Sustainable Public Transportation*. Presentation at a meeting at BAPPENAS. Jakarta. 13 November. https://balitbanghub.dephub.go.id/index.php/file/118.

In accordance with the Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, the Ministry of National Development Planning (BAPPENAS) issues its PPP Book every year to provide information on the PPP projects available for investment in Indonesia. The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on PPP Book 2019, the PPP projects in the pipeline for the roads sector are listed in Table 10.

Table 10: Pipeline of Public–Private Partnership Road Projects, 2019

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Construction Start
		($ million)	(Rp trillion)			
Yogyakarta–Bawen Toll Road	Under preparation	1,019	14.2	2019	2020	2020
Riau Non-Toll Road Preservation	Under preparation	68	0.9	2019	2020	2021
UPPKB in Java and Sumatra	Under preparation	24	0.3	2018	2020	2021
Probolinggo–Banyuwangi Toll Road	Already tendered	1,719	23.9	UA	2017	2020
Semarang–Demak Toll Road	Already tendered	1,090	15.1	2018	2020	2020
South Sumatra Non-Toll Road Preservation	Already tendered	194	2.7	2018	2019	2020

Rp1 = $0.00007201, Rp = Indonesian rupiah (national currency), UPPKB = Motor Vehicle Weighing Implementation Unit, UA = Unavailable

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

The PPP Book also provides information on prospective PPP infrastructure projects in the Indonesian roads sector. These projects have a high probability of being included in the PPP pipeline in the future, in either the under-preparation or ready-to-offer category, after passing the evaluation and satisfying the administrative criteria. A list of prospective roads sector projects according to PPP Book 2019 is provided in Table 11.

Table 11: Prospective Public–Private Partnership Road Infrastructure Projects, 2019

Project Name	Government Contracting Agency
Road and Bridge in Central and Western Sumatra Road Corridor	Ministry of Public Works and Housing
Bridges in Trans-Java Main Corridor	Ministry of Public Works and Housing
Trans Papua (Jayapura–Wamena)	Ministry of Public Works and Housing
Tanjung Jabung Bridge	Regent of Tanjung Jabung
Semanan–Balaraja Toll Road (unsolicited)	Ministry of Public Works and Housing
Kamal–Teluk Naga–Rajeg Toll Road (unsolicited)	Ministry of Public Works and Housing

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Project Name	Government Contracting Agency
Akses Patimban Toll Road (unsolicited)	Ministry of Public Works and Housing
Gedebage–Tasikmalaya–Cilacap Toll Road (unsolicited)	Ministry of Public Works and Housing
Solo–Yogyakarta–NYIA Kulon Progo Toll Road	Ministry of Public Works and Housing
Balikpapan–Penajam Passer Utara Bridge (unsolicited)	Ministry of Public Works and Housing
TOD Jatijajar	Ministry of Transportation
TOD Baranangsiang	Ministry of Transportation
TOD Pondok Cabe	Ministry of Transportation
Air Haji Motor Vehicle Weighing Implementation	Ministry of Transportation
UPPKB in Pesisir Selatan, West Sumatra	Ministry of Transportation
Sumatra	Ministry of Transportation

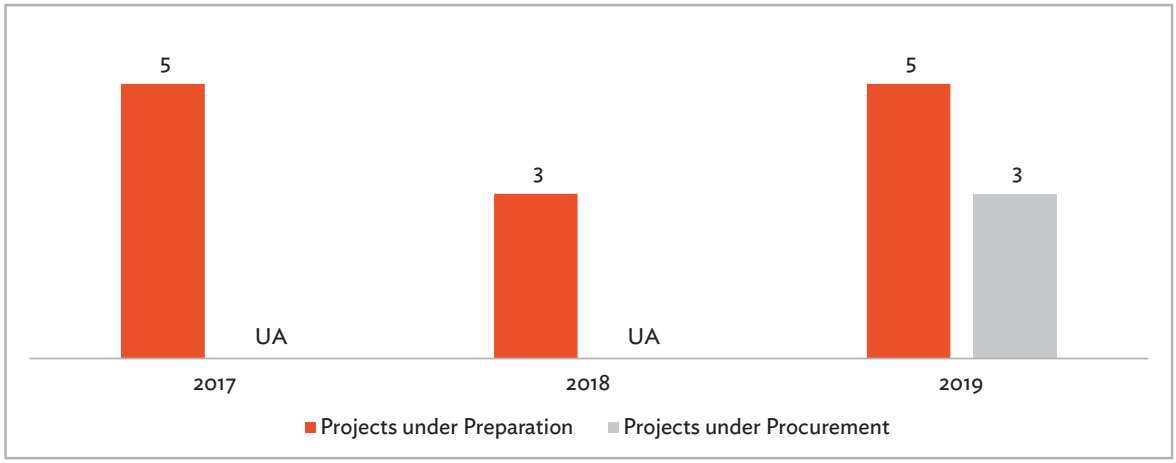
NYIA = New Yogyakarta International Airport, TOD = transit-oriented development, UPPKB = Motor Vehicle Weighing Implementation Unit.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

3.1 Projects under Preparation or Procurement

Figure 16 shows the number of PPP projects which are under preparation and procurement in the roads sector.

Figure 16: Public–Private Partnership Roads under Preparation and Procurement



[a] There are no available data for projects under procurement in 2017 and 2018.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta, Indonesia (3 years: 2017–2019).

https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf; https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf; https://library.pppknowledgelab.org/documents/5826/download.

Table 12 shows the toll road PPP projects that are listed as "under preparation" in PPP Book 2019, which was published by BAPPENAS, based on data from BPJT.

Table 12: Public–Private Partnership Toll Road Projects Under Preparation, 2019

Name of Project	Distance (km)	Investment Cost	
		($ million)	(Rp billion)
Gedebage–Tasikmalaya–Cilacap	206.6	57.59	799.8
Kamal–Teluk Naga–Rajeg	38.6	23.16	321.6
Semanan–Balaraja	31.9	16.00	222.2
Akses Patimban	37.7	6.35	88.2
Riau Non-Toll Road Preservation	43.0	1.11	15.4

Rp1 = $0.00007201

km = kilometer, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download; Indonesia Toll Road Authority (BPJT). https://bpjt.pu.go.id/.

Table 13 shows the toll road PPP projects that are listed as "under procurement" in PPP Book 2019.

Table 13: Public–Private Partnership Toll Road Projects Under Procurement, 2019

Name of the Project	Distance (km)	Investment Cost	
		($ million)	(Rp billion)
Jembatan Balikpapan–Penajam Paser Utara	7.90	15.53	215.7
Solo–Yogyakarta–NYIA Kulon Progo	93.14	28.85	400.6
Yogyakarta–Bawen	76.36	17.38	241.4

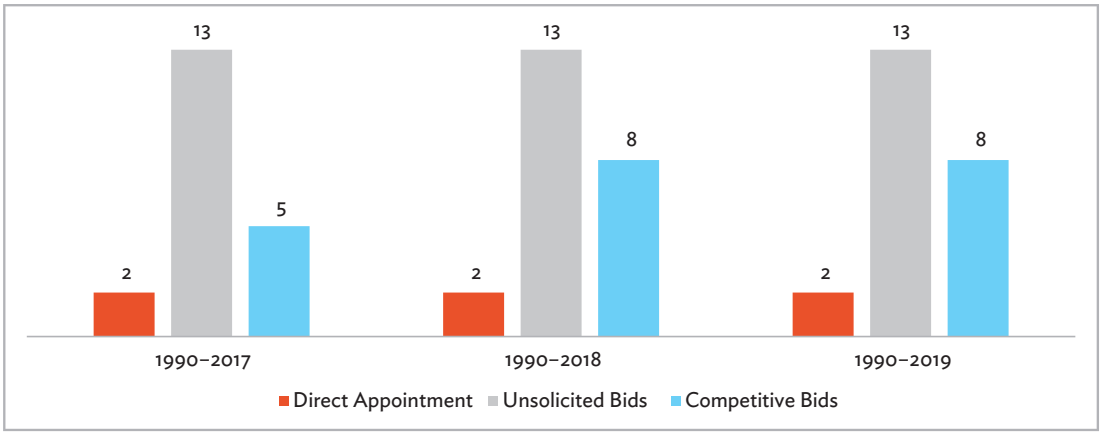
km = kilometer, NYIA = New Yogyakarta International Airport, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download; Indonesia Toll Road Authority (BPJT). https://bpjt.pu.go.id/.

4. Features of Past Public–Private Partnership Project in the Road Sector

Figure 17 presents the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the roads sector In Indonesia.

Figure 17: Modes of Procurement for Public–Private Partnership Roads

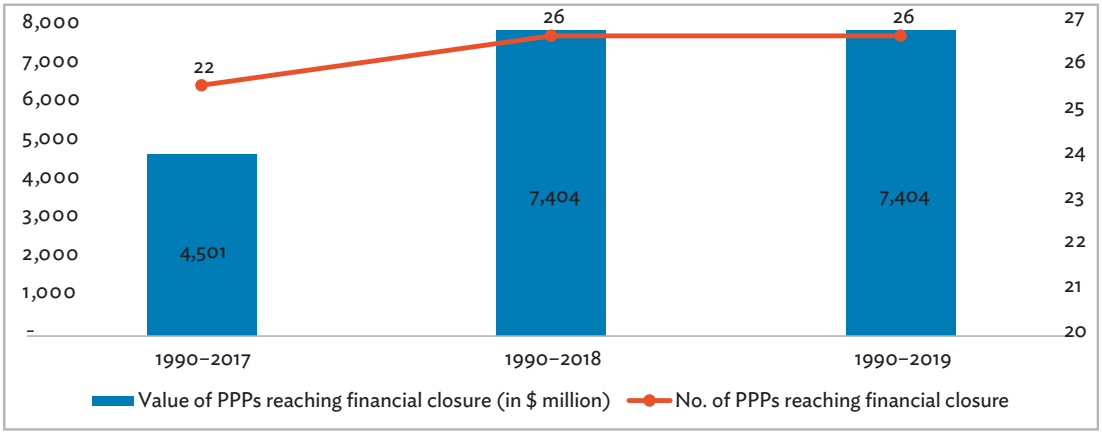


Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 18 shows the number of PPP projects which have reached financial closure and the total value of those projects in the roads sector in Indonesia.

Figure 18: Public–Private Partnership Projects Reaching Financial Closure



PPP = public–private partnership.

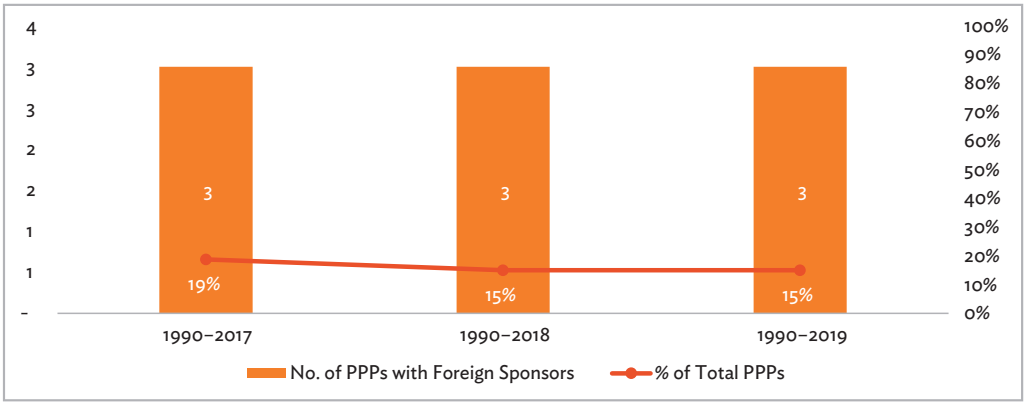
Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The South Sumatra Non-Toll Road Preservation is the first non-toll (availability-based payment) PPP project in the roads sector. The project had not achieved financial closure in 2019.

Figure 19 presents the number of PPP projects which have received foreign sponsor participation in the roads sector.

Figure 19: Public–Private Partnership Road Projects with Foreign Sponsor Participation



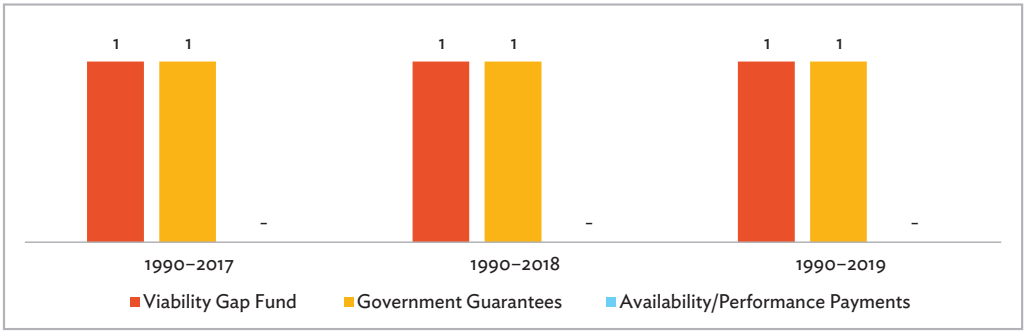
PPP = public–private partnership.

Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 20 shows the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the roads sector.

Figure 20: Public–Private Partnership Road Projects with Foreign Sponsor Participation



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

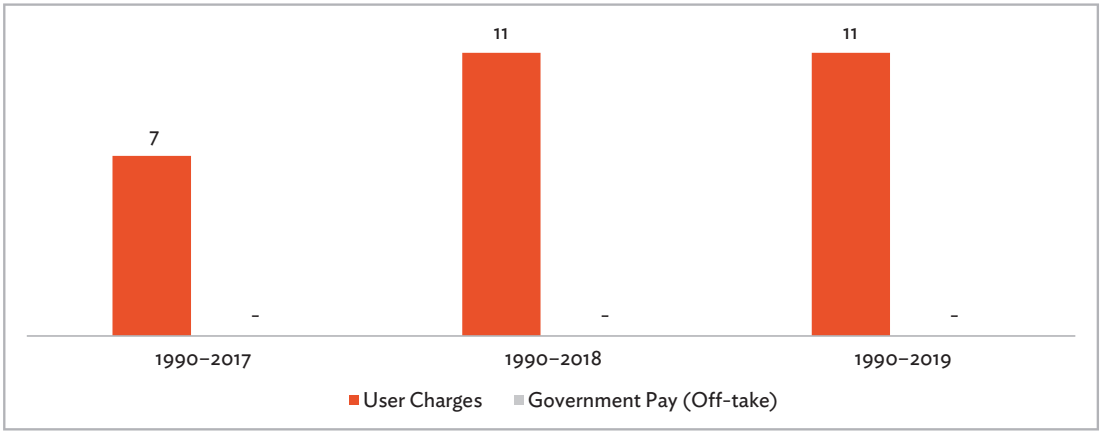
Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The Cisumdawu Toll Road received capital subsidy from the government. The Cikampek–Palimanan Toll Road received a revenue guarantee from the government.[29]

[29] World Bank. *Infrastructure Finance, PPPs and Guarantees. Country Snapshots*: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 21 presents the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the roads sector.

Figure 21: Payment Mechanisms for Public–Private Partnership Road Projects



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Roads Sector

Toll road tariffs are controlled by the Minister of Public Works and Public Housing, with BPJT having the authority to recommend the initial fare and subsequent tariff adjustments to the minister. Regulations stipulate that the tariffs will be reviewed every 2 years. The tariffs, which vary according to the type of vehicle, are published on the BPJT website.[30] Examples of tariffs for the various vehicle types are shown in Table 14 for three toll roads.

Table 14: Toll Road Tariffs for Various Types of Vehicles (Rp)

Road	Group I	Group II	Group III	Group IV	Group V	Group VI
Jakarta Outer Ring Road	15,000	15,000	22,500	30,000	30,000	UA
Jakarta–Bogor–Ciawi	7,000	11,500	11,500	16,000	16,000	UA
Jakarta–Tangerang	5,500	6,500	9,000	11,000	13,000	UA

Rp = Indonesian rupiah (national currency), UA = Unavailable

Note: Group I consists of small cars, pickup trucks, and passenger buses; Group II includes trucks with two axles; Group III includes trucks with three axles; Group IV includes trucks with four axles; Group V includes trucks with five axles and truck trailers; and Group 6 includes motorcycles.

Source: Indonesian Toll Road Authority (BPJT). http://bpjt.pu.go.id/.

30 BPJT. *http://bpjt.pu.go.id/.*

4.2 Typical Risk Allocations for Public–Private Partnership Road Projects

Table 15: Risk Allocations to the Public and Private Sectors for Road Projects, by Risk Type

Risk Type	Private	Public	Shared	Comments
Traffic	✓			
Collection risk	✓			
Tariff risk		✓		
Competition risk		✓		
Government payment risk		✓		The South Sumatra Non-Toll Road Preservation is the first non-toll (availability-based payment) PPP project in the roads sector. The contract was awarded in 2019.
Environmental and social risk			✓	
Land acquisition risk	✓			
Permits	✓			
Geotechnical risk	✓			
Brownfield risk: inventories, studies, property boundaries, project scope	✓			
Political risk		✓		
Force majeure			✓	
Foreign exchange risk	✓			

PPP = public–private partnership.

✓ = Yes.

4.3 Financing Details of Public–Private Partnerships in the Road Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation[a]	1	2	2
PPP projects that received export credit agency/ international financing institution support[a]	1	2	2
Typical debt:equity ratio	70:30	70:30	70:30
Time for financial closure	6 months	6 months	6 months
Typical concession period	15–45 years	15–45 years	15–45 years
Typical Financial Internal Rate of Return	10%–16%	10%–16%	10%–16%

PPP = public–private partnership.

Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the Road Sector

- Land acquisition delays due to the decentralization of the process and to the objections of local residents have led to the time and cost overruns of several projects.
- Another issue is the delay in reimbursements of land acquisition fees due to the lack of clarity during the processing of documents by the commitment-making officer, leading to higher interest expenses for the private sector.
- The absence of a standard risk-sharing matrix and of concession agreements has led to several projects facing overruns and revenue shortfalls.
- Lower demand, due to the delayed development of other supporting infrastructure (road connectivity), has lessened the private sector appetite for infrastructure investment.
- Government supervision during the operation-and-maintenance (O&M) stage of projects was lower in intensity.

RAILWAYS

Parameter	Value	Unit of Measurement
Length of total railway network	4,684	km
Total number of passengers carried	25,654.00	million pkm
Total volume of freight carried	7,166.00	million ton-km
Quality of railways infrastructure	4.70	1 (lowest)–7 (highest)

km = kilometers, pkm = passenger-kilometer, ton-km = ton kilometer.

Notes:

1. "Passenger-kilometer" refers to the transport of one person over 1 km, with the data expressed in millions of pkm.
2. "Ton-kilometer" refers to the transport of a ton of cargo over 1 km, with the data expressed in millions of ton-km.

Sources: Economist Intelligence Unit. *Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure.* https://infrascope.eiu.com/; TheGlobalEconomy.com. Railway Passengers – Country Rankings. https://www.theglobaleconomy.com/rankings/Railway_passengers/ ; TheGlobalEconomy.com. Railway Transport of Goods – Country Rankings. https://www.theglobaleconomy.com/rankings/Railway_transport_of_goods/; TheGlobalEconomy.com. Railroad Infrastructure Quality – Country Rankings. https://www.theglobaleconomy.com/rankings/railroad_quality/.

1. Contracting Agencies in the Railway Sector

The Ministry of Transportation (MOT) or the head of a government agency, regional government, state-owned enterprise (SOE), or regional government-owned enterprise can act as a concession authority. In 2019, a consortium led by PT Pembangunan Perumahan (Persero) Tbk won the tender for the Makassar–Parepare Railway project. The concession was awarded by the MOT.

2. Railway Sector Laws and Regulations

The key sector-specific regulations are:

- Law No. 23 of 2007 on Railways, which provides the overall legal framework for railways;
- Government Regulation No. 56 of 2009 on Implementation of Railway Affairs, as amended by Government Regulation No. 6 of 2017 on Railway Service, both of which support the establishment of a railway business

entity without a bidding process after the railway business entity receives proposal approvals from the minister, governor, or regent,[31] or mayor in accordance with their respective authority;

- Government Regulation No. 72 of 2009 on Rail Traffic and Transportation, as amended by Government Regulation No. 61 of 2016, both of which cover the tariffs that can be charged for freight and passengers;
- MOT Regulation No. 11 of 2012 on the Procedure for Railway Alignment Determination;
- MOT Regulation No. 24 of 2015 on the Standard of Railway Safety, which specifically regulates the safety standards to be implemented by the railway infrastructure management; and
- MOT Regulation No. 66 of 2013 on Railways Operation Infrastructure Permits, as amended by MOT Regulation No. 21 of 2019.

2.1 Restrictions on Foreign Investment in the Railway Sector

The maximum equity investment allowed for foreign investors in greenfield projects in the railway sector is 49%, under Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

Parameter	2017	2018	2019
Maximum for foreign ownership of equity allowed in greenfield projects	49%	49%	49%

2.2 Standard Contracts in the Railway Sector

Type of Contract	Availability
PPP/concession agreement	×
Performance-based operation and maintenance contract	×
Engineering procurement and construction contract	✓

O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

3. Railway Sector Master Plan

There are no specific details on the sector master plan for railways available in English, but RPJMN 2020-2024 has listed the following PPP projects:

- Construction of High-Speed Trains: Jakarta–Surabaya, at the cost of Rp107 trillion, and Jakarta–Bandung, at the cost of Rp82 trillion;
- Construction of Freight Trains (Trans-Sulawesi Railway, Makassar–Parepare) at a cost of Rp18 trillion through PPP and financing from State Shari'a Securities;[32] and
- The Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) has listed Soekarno Airport Express Train–Hatta (estimated project cost of Rp25 trillion) as a priority project.

[31] A regent is the elected official who heads a regency, which is a level of administration beneath a province but above a municipality.

[32] Surat Berharga Syariah Negara (SBSN), State Shari'a Securities, are state securities issued in Indonesian rupiahs and foreign currencies. Based on Islamic principles, they require assets as underlying guarantees. SBSN project-based sukuk have prioritized the development of infrastructure and of public service facilities.

In accordance with the Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, the Ministry of National Development Planning (BAPPENAS) issues a PPP Book every year to provide information on the PPP projects available for investment in Indonesia. The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on PPP Book 2019, the PPP projects in the pipeline for the railway sector are listed in Table 16:

Table 16: Pipeline of Public–Private Partnership Railway Projects, 2019

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Construction Start
		($ million)	(Rp trillion)			
Medan Municipal Transport	Under preparation	891	12.4	2019	2020	2021
Semarang LRT	Under preparation	1,041	14.5	2019	2020	2020
Makassar–Parepare Railway	Already tendered	147	2.0	2018	2019	2019

Rp1 = $0.00007201, Rp = Indonesian rupiah (national currency), LRT = Light Rail Transit.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

The PPP Book also provides information on prospective PPP infrastructure projects in the Indonesian railway sector. These projects have a high probability of being included in the PPP pipeline in the future, in either the under-preparation or ready-to-offer category, after passing the evaluation and satisfying the administrative criteria. A list of prospective railway-sector projects according to PPP Book 2019 is provided in Table 17.

Table 17: Prospective Public–Private Partnership Railway Infrastructure Projects, 2019

Project Name	Government Contracting Agency
Siantar–Parapat Railway	Regional government
Tanjung–Banjarmasin Railway	Regional government
Perkotaan–Bandung Railway	Regional government
Bandara–Kertajati Railway	Regional government
Maminasata Railway	Regional government
Lahat–Tarahan Railway	Ministry of Transportation
Shortcut Cibungar–Tanjung Rasa Railway	Ministry of Transportation
Mengwitani–Singaraja Railway	Regional government
Medan–Binjai–Deli Serdang Railway	Regional government
Penkanbaru–Jambi Railway	Ministry of Transportation

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Project Name	Government Contracting Agency
Manado–Bitung Railway	Ministry of Transportation
Balikpapan–Samarinda Railway	Ministry of Transportation
Pontianak–Sangau Railway	Ministry of Transportation
Parigi–Poso Railway	Ministry of Transportation
Patimban Port Railroad Access	Ministry of Transportation
Cibubur–Bogor LRT	Ministry of Transportation
Jakarta MRT Service Extension	Ministry of Transportation
Jakarta Elevated Loop Line	Ministry of Transportation

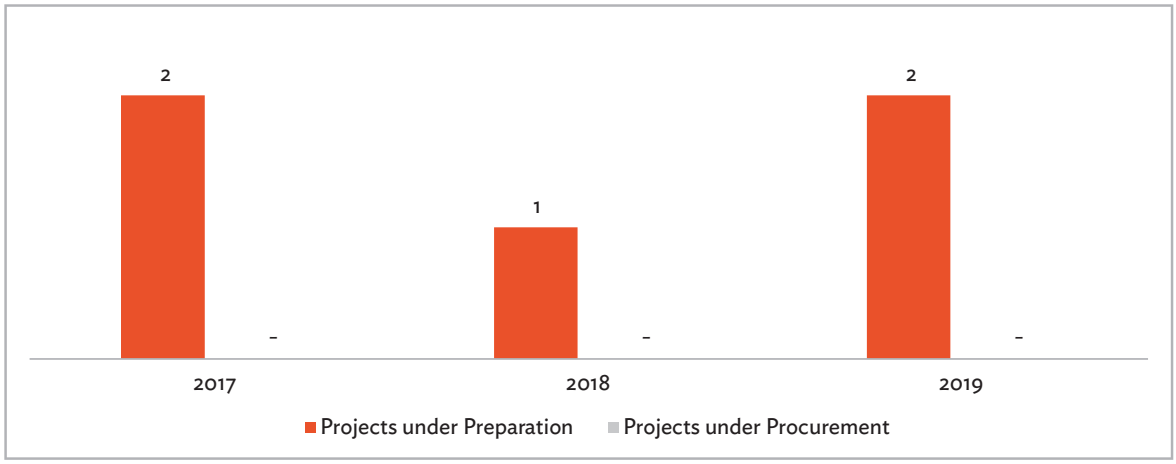
LRT = Light Rail Transit, MRT = Mass Rapid Transit.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

3.1 Projects under Preparation or Procurement

Figure 22 shows the number of PPP projects which are under preparation and procurement in the railway sector in Indonesia.

Figure 22: Public–Private Partnership Railway Projects under Preparation and Procurement



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). Public–Private Partnership: Infrastructure Projects Plan in Indonesia. Jakarta, Indonesia (3 years: 2017–2019).

https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf; https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf; and https://library.pppknowledgelab.org/documents/5826/download.

The railway projects listed as "under preparation" in PPP Book 2019, published by BAPPENAS, are described as follows:

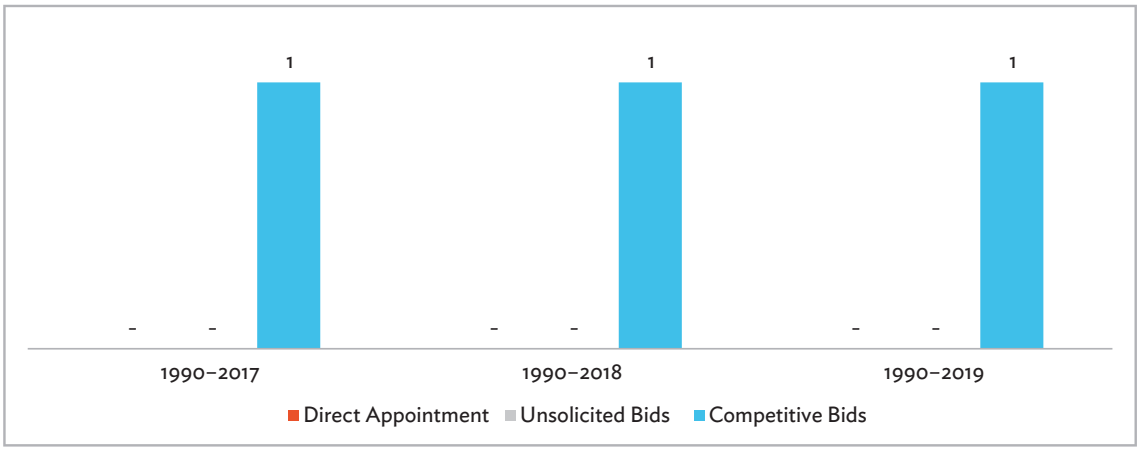
- Medan Municipal Transport, a light rail transport (LRT) system, is in the FBC stage of preparation. The estimated project cost is $824 million (approximately Rp12.4 trillion).
- Semarang LRT is also in the FBC stage of preparation. The estimated project cost is $1.04 billion (approximately Rp14.5 trillion).

Another project, the Makassar–Parepare Railway was awarded after competitive bidding. The scope of work of the private partner's development of the F segment, which is 13.7 kilometers (km) long, and the operation and maintenance (O&M) of all four parts of the railway (B, C, D, and F segments). The project was awarded by the MOT, and the private developer will earn from availability payments based on the investment return for the project. The Indonesia Infrastructure Guarantee Fund (IIGF) is working on a guarantee structure to cover the availability payments and termination cost.

4. Features of Past Public–Private Partnership Projects

Figure 23 presents the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the railway sector in Indonesia.

Figure 23: Modes of Procurement for Public–Private Partnership Railway Projects

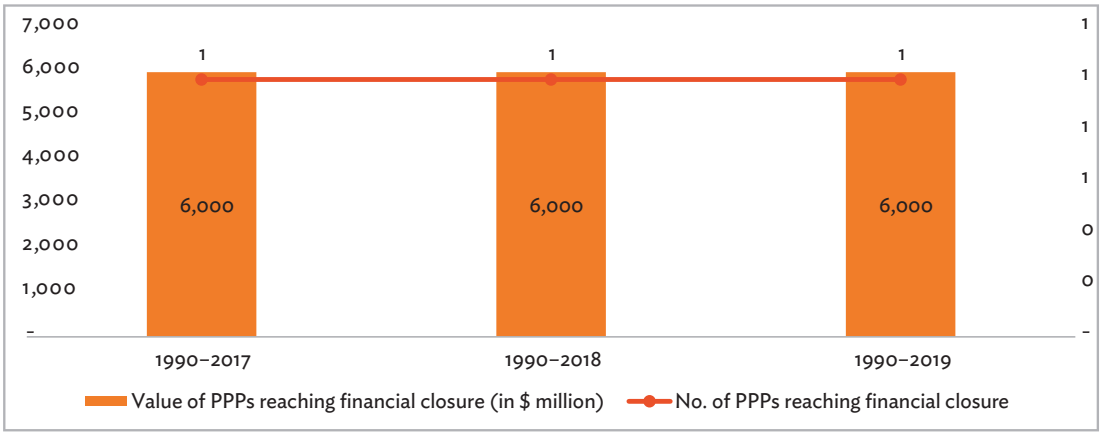


Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 24 shows the number of PPP projects which have reached financial closure and the total value of those projects in the railway sector in Indonesia.

Figure 24: Public–Private Partnership Railway Projects Reaching Financial Closure



PPP = public–private partnership.

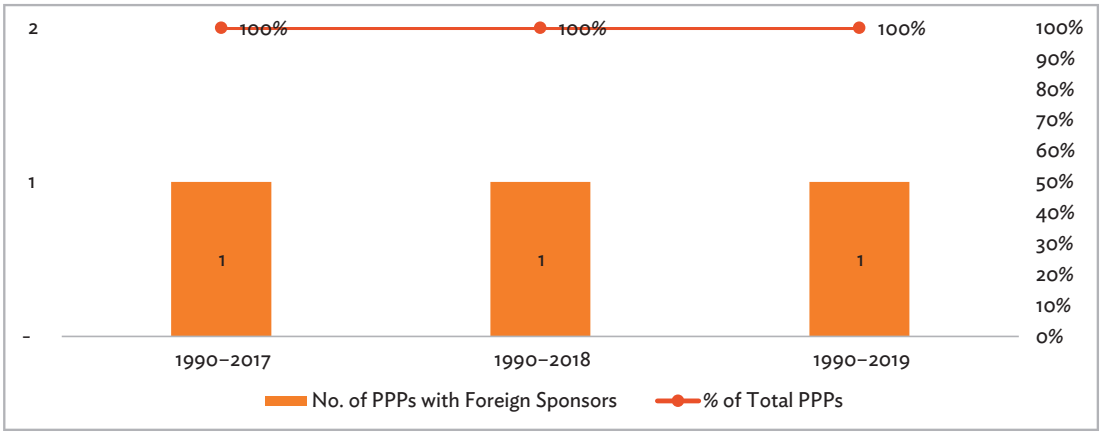
Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

One project, the Jakarta–Bandung High-Speed Railway, achieved financial closure in 2017. This is the only project in the sector to have done so, according to the World Bank's database. Jakarta–Bandung high-speed rail line was awarded in 2016 to China Railway 18th Bureau Group Co., Limited.

Figure 25 shows the number of PPP projects which have reached financial closure and the total value of those projects in the railway sector in Indonesia.

Figure 25: Public–Private Partnership Railway Projects with Foreign Sponsor Participation



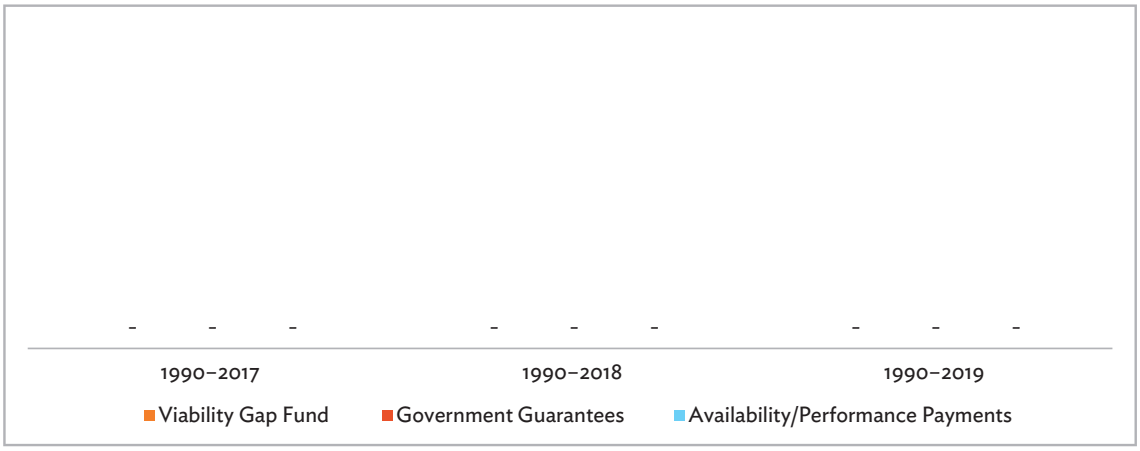
PPP = public–private partnership.

Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 26 presents the number of PPP projects which have received foreign sponsor participation in the railway sector in Indonesia.

Figure 26: Government Support to Public–Private Partnership Railway Projects

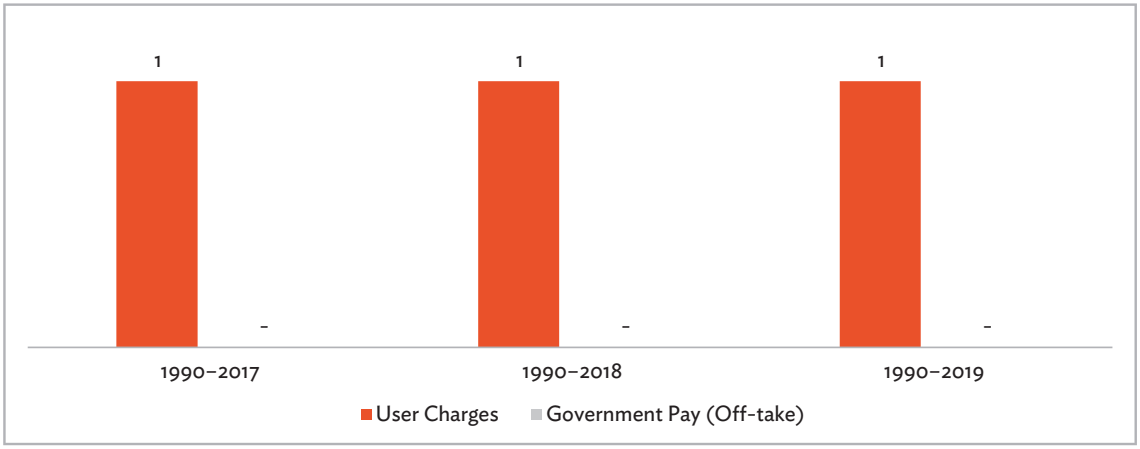


Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The Makassar–Parepare Railway project will derive its earnings from availability payments (Figure 27). The IIGF is working on a guarantee structure to cover the availability payments and termination cost.

Figure 27: Payment Mechanism for Public–Private Partnership Railway Projects



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Railway Sector

No data are available regarding tariffs in this sector.

4.2 Typical Risk Allocations for Railway Public–Private Partnership Projects

Based on the indicative PPP project structures for the Medan Municipal Transport LRT and Makassar–Parepare Railway PPP projects, the typical risk allocations for PPP projects in the railways sector are shown in Table 18.

Table 18: Risk Allocations to the Public and Private Sectors for Railway Projects, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand		✓		The demand risk, the tariff risk, and the revenue-collection risk are with the public sector.
Revenue collection		✓		
Tariff		✓		
Government payment	✓			
Environment and social			✓	
Land acquisition		✓		Land acquisition is a slow and complex process in Indonesia; the private sector has no appetite to take any risks on land acquisition.
Interface			✓	
Handover			✓	
Political			✓	
Foreign Exchange (FOREX)			✓	

✓ = Yes.

4.3 Financing Details of Public–Private Partnerships in the Railway Sector

As no PPP railway projects had achieved financial close by the end of 2019, there is no information available on the financing details of projects in this sector.

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	UA	UA	UA
PPP projects that received export credit agency/international financing institution support	UA	UA	UA
Typical debt:equity ratio	UA	UA	UA
Time for financial closure	UA	UA	UA
Typical concession period	UA	UA	UA
Typical Financial Internal Rate of Return	UA	UA	UA

PPP = public–private partnership, UA = Unavailable

Sources: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the Railway Sector

- The PPP ecosystem in Indonesia for the railways sector is in its nascent stage. There is no past experience of executing projects in this sector, so it is difficult to avoid taking first-of-a-kind risks.
- There is a need for improvements in the feeder network for commuters from their various points of origin to the railway stations, and from the railway stations to their final destinations. The result would be a significant increase in ridership.
- Land acquisition remains a major challenge for project development.
- Private bus travel offers very competitive fares, while the cost-recovery-plus orientation of the railway system means substantially higher tariffs. Therefore, a strong value proposition (emphasizing superior safety, reliability, and availability, among other features) or a heavy cross-subsidy would be required to encourage passengers to shift to the railways (footnote 3).

PORTS

Parameter	Value	Unit of Measurement
Total number of ports	154	Number
Total freight capacity of all the ports	UA	MTPA
Total container traffic at all the ports	12,853,000	TEUs
Quality of port infrastructure	4.00	1 (lowest)–7 (highest)
Quality of trade and transport-related infrastructure	2.60	1 (lowest)–5 (highest)

MTPA = million tons per annum, TEU = twenty-foot equivalent unit (20-foot standard container), UA = Unavailable.

Sources: World Port Source. World Ports by Country. http://www.worldportsource.com/countries.php; TheGlobalEconomy.com. Port Traffic – Country Rankings. https://www.theglobaleconomy.com/rankings/Port_traffic/; Economist Intelligence Unit. Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure. https://infrascope.eiu.com/.

1. Contracting Agencies in the Port Sector

For PPP projects in the Indonesian port sector, the government contracting agency (GCA) is generally the relevant port authority, represented by the Ministry of Transportation (MOT). State-owned enterprises (SOEs) such as PT Pelabuhan Indonesia (Pelindo) I, II, III, and IV could also act as contracting authorities. These SOEs have entered into joint ventures with the private sector in the past.

2. Port Sector Laws and Regulations

The port sector in Indonesia is largely regulated under Law No. 17 of 2008 on Shipping (the Shipping Law or Navigation Act). Prior to the Shipping Law, all the major commercial ports in Indonesia were controlled by the four state-owned Indonesian port corporations (PT Pelabuhan Indonesia I, II, III, and IV), which acted as both the sole port operator and port authority, and had regulatory authority over private sector ports. The law has removed the state-sector monopoly on Indonesia's ports; and to encourage participation by the private sector, it maintains a clear separation between the port regulator and the operator, thus reducing the role of the Indonesian port corporations to that of a port operator. Other relevant regulations in the port sector are as follows:

- Government Regulation No. 20 of 2010 on Inland Waterways Transport;
- Government Regulation No. 61 of 2009 on Port Affairs, as amended by Government Regulation No. 64 of 2015;

- MOT Regulation No. 62 of 2010 on the Organization and Work Procedure of the Port Operator Unit, as amended by MOT Regulation No. 130 of 2015;
- MOT Regulation No. 95 of 2015 on Guidelines for Determining Port Service Charges by Port Enterprises;
- Government Regulation No. 20 of 2010 on Water Transportation, as amended by Government Regulation No. 22 of 2011;
- Government Regulation No. 21 of 2010 on Maritime Environmental Protection;
- MOT Regulation No. 51 of 2015 on the Implementation of Seaports, as amended by MOT Regulation No. 146 of 2016 (partly revoked by MOT Regulation No. 24 of 2017);
- MOT Regulation No. 15 of 2015 on Concession and Other Forms of Cooperation between the Government and Port Business Entities in the Port Area, as amended by MOT Regulation No. 166 of 2015;
- Ministry of Transport Decree Number KP 901 of 2016 on National Port Master Plan; and
- Government Regulation No. 15 of 2016 on Types and Tariffs of Non-Tax State Revenue Applicable to the MOT (footnote 3).

The key institutions involved in regulating this sector are listed in Table 19.

Table 19: Key Institutions That Regulate the Port Sector in Indonesia

Agency	Function
Port authority	• Providing onshore and offshore land for the port • Providing and maintaining anchor, port pool, cruise line, and road arrangement • Providing and maintaining aids to navigation • Ensuring safety and order in the port • Ensuring and maintaining the sustainability of the port environment • Preparing the port master plan comprising the port working area and port interest area • Suggesting a rate, to be determined by the Ministry of Transportation, for the use of water, land, and port facilities provided by the government, as well as port services provided by the port authorities in accordance with the prevailing laws and regulations • Ensuring the smooth distribution of goods
Port administration unit	• Responsible for ports that are not yet commercially operated
Harbor master	• Responsible for the safety and security of the port, including implementation, supervision, and law enforcement • Responsible for the search and rescue in the vicinity of the port

Source: ADB. 2019. *Public–Private Partnership Monitor (second edition).* Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitorsecond-edition.pdf.

2.1 Foreign Investment Restrictions in the Port Sector

The maximum equity investment allowed for foreign investors in greenfield projects in the port sector has been 49%, as shown below.

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects	49%	49%	49%

Source: Government of Indonesia, Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

2.2 Standard Contracts in the Port Sector

Type of Contract	Availability
PPP/concession agreement	×
Performance-based operation and maintenance contract	×
Engineering procurement and construction contract	✓

O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

3. Port Sector Master Plan

There are no specific details on the sector master plans for ports available in English. The National Medium-Term Development Plan (RPJMN), 2020–2024 has listed Development of an Integrated Seven-Port Network as a major project. However, this project, whose cost is estimated at $1 billion (Rp14 trillion), is expected to be executed by Indonesian SOEs.

In accordance with the Minister of National Development Planning/Head of National Development Planning Agency Regulation No. 4 of 2015, the Ministry of National Development Planning (BAPPENAS) issues a PPP Book every year to provide information on the PPP projects available for investment in Indonesia. The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on PPP Book 2019, the PPP projects in the pipeline for the port sector are listed in Table 20.

Table 20: Pipeline of Public–Private Partnership Port Projects, 2019

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Construction Start
		($ million)	(Rp trillion)			
Development of Baubau Port	Under preparation	34	0.5	2018	2020	2020

Rp1 = $0.00007201, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia, Planning/National Development Planning Agency (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019.* Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

The PPP Book also provides information on prospective PPP infrastructure projects in the Indonesian port sector. These projects have a high probability of being included in the PPP pipeline in the future, in either the under-preparation or ready-to-offer category, after passing the evaluation and satisfying the administrative criteria. A list of prospective port-sector projects according to PPP Book 2019 is provided in Table 21.

Table 21: Prospective Public–Private Partnership Port-Sector Infrastructure Projects, 2019

Project Name	Government Contracting Agency
West Papua Ferry Port	Ministry of Transportation
Anggrek Port	Ministry of Transportation
Banggai Port	Ministry of Transportation
Belang-Belang Port	Ministry of Transportation
Kaimana Port	Ministry of Transportation

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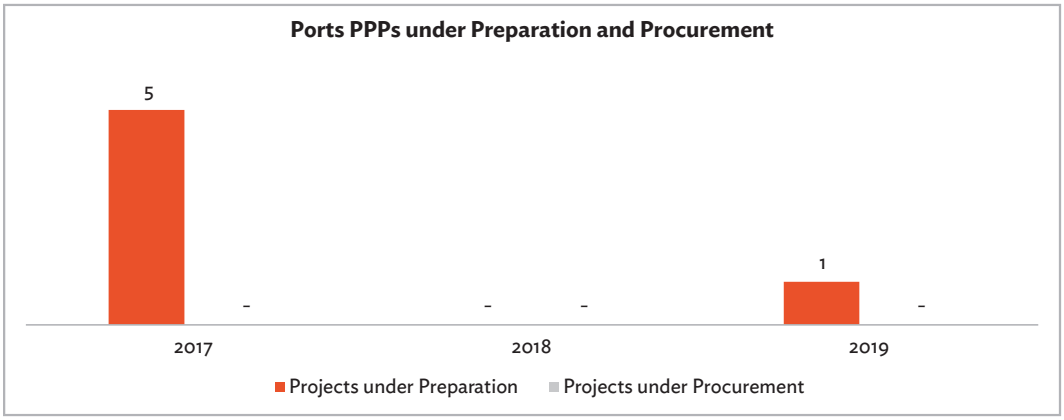
Project Name	Government Contracting Agency
Serui Port	Ministry of Transportation
Saumlaki Port	Ministry of Transportation
Labuan Bajo Port	Ministry of Transportation
Namlea Port	Ministry of Transportation
Tahuna Port	Ministry of Transportation
Tobelo Port	Ministry of Transportation
Dobo Port	Ministry of Transportation
Pomako Port	Ministry of Transportation
Cikarang Bekasi Laut Inland Waterway	Ministry of Transportation

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

3.1 Projects under Preparation and Procurement in the Port Sector

Figure 28 shows the number of PPP projects which are under preparation and procurement in the port sector.

Figure 28: Public–Private Partnership Port Projects under Preparation and Procurement



Note: "-" includes: no projects, data not available, or not applicable.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*. Jakarta, Indonesia (3 years: 2017–2019).

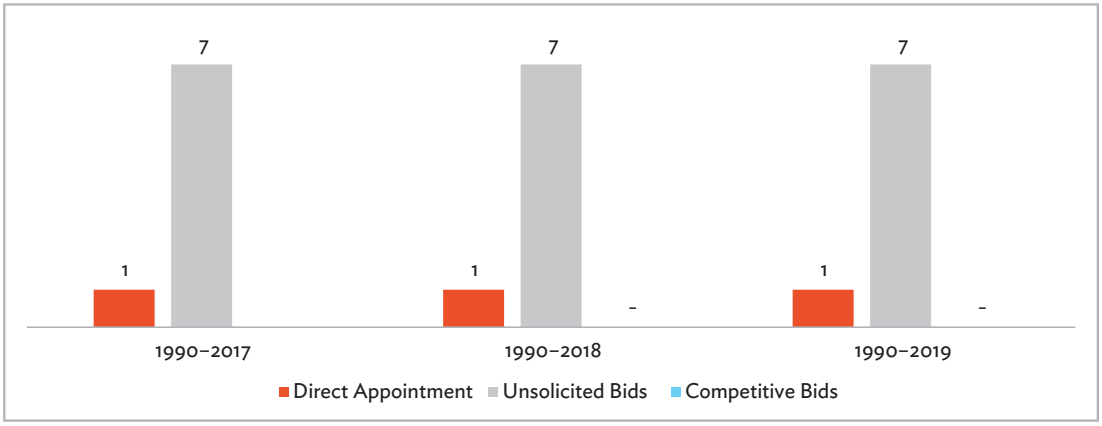
https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

The project under preparation in 2019 was the development of Baubau Port, for which the estimated cost is $33.6 million (Rp0.5 trillion).

4. Features of Past Public–Private Partnership Projects in the Port Sector

Figure 29 shows the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the port sector in Indonesia.

Figure 29: Modes of Procurement for Public–Private Partnership Port Projects

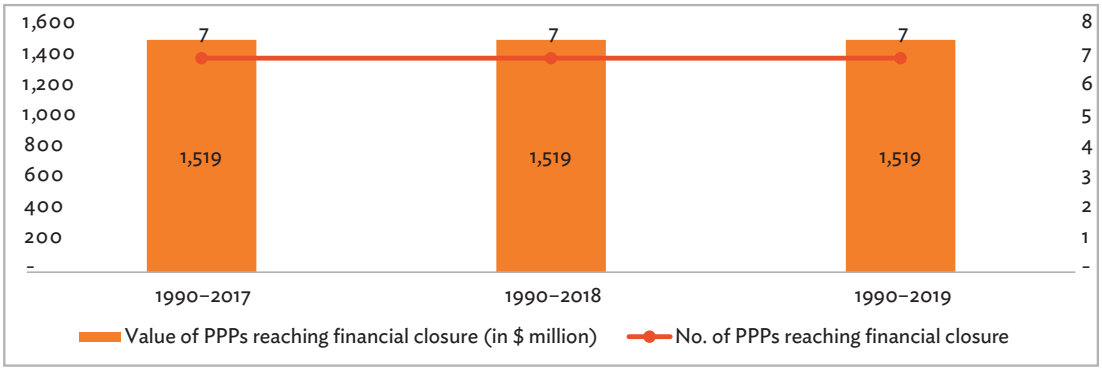


Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 30 presents the number of PPP projects which have reached financial closure and the total value of those projects in the port sector in Indonesia.

Figure 30: Public–Private Partnership Port Projects Reaching Financial Closure



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

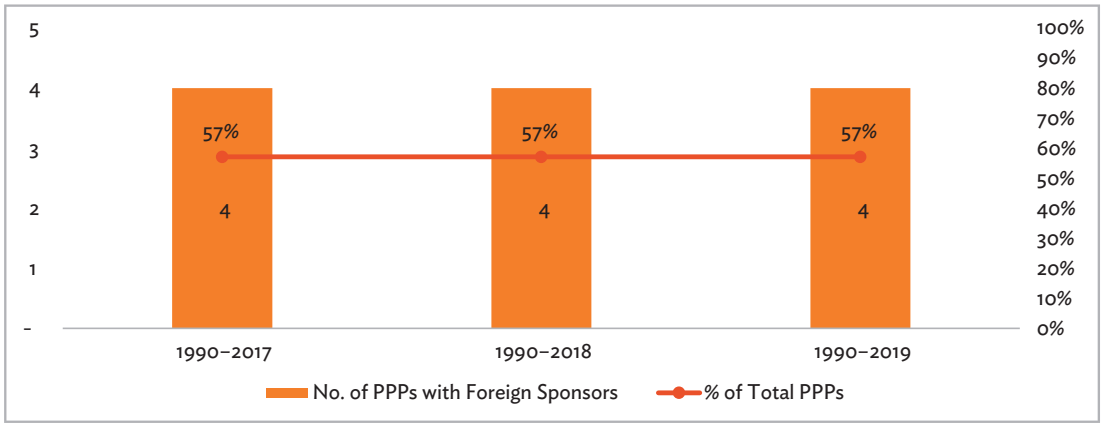
Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The concession period varied from 10 to 50 years. The type of concessions included

- build–rehabilitate–operate–transfer (BROT),
- rehabilitate–operate–transfer (ROT), and
- build–operate–transfer (BOT).

Figure 31 shows the number of PPP projects which have received foreign sponsor participation in the port sector in Indonesia.

Figure 31: Public–Private Partnership Port Projects with Foreign Sponsor Participation



PPP = public–private partnership.

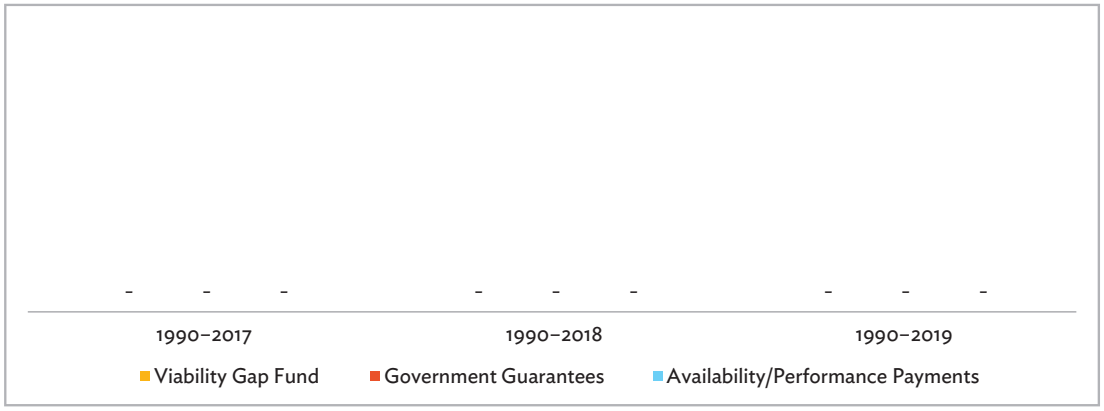
Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Foreign sponsors such as DP World (Dubai), International Container Terminal Services (Philippines), and Hutchison Whampoa Limited (Hong Kong, China) have invested in Indonesia's ports.

Figure 32 presents the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the port sector.

Figure 32: Government Support to Public–Private Partnership Port Projects

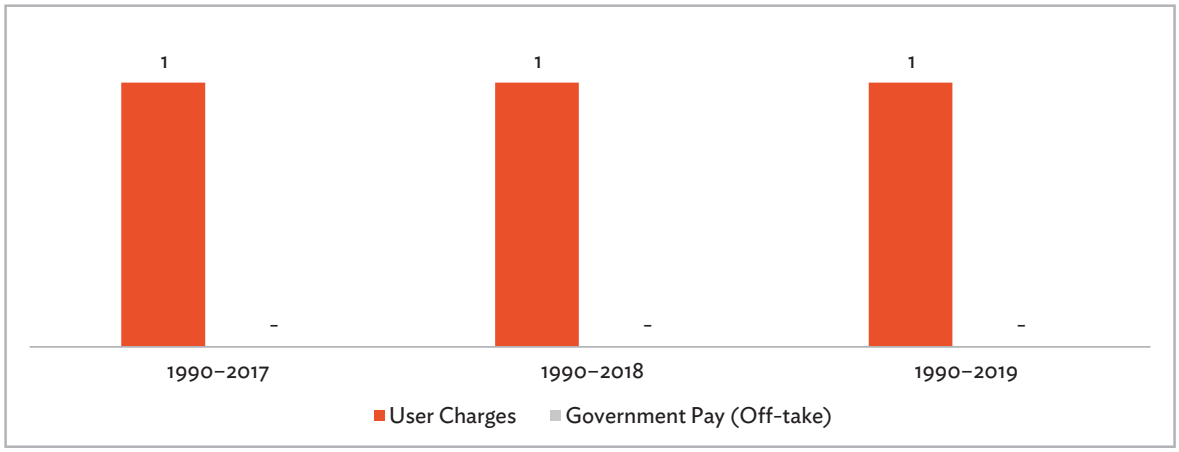


Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 33 provides the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the port sector in Indonesia.

Figure 33: Payment Mechanisms for Public–Private Partnership Port Projects



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Port Sector

Indonesia is currently implementing a common model of port administration known as the "Landlord Port." The government owns, provides, and regulates access to port land, port waters, and basic port infrastructure, while port operators provide services over a long duration under a concession agreement. The newly established port authorities and private terminal operators can establish commercial rates for port services that are market related. The government will oversee the rates to ensure that port operators behave competitively (footnote 3).

Guidelines for stipulating port tariffs are specified under MOT Regulation No. 95 of 2015. Tariffs for services performed by the port authorities are determined by the port authorities themselves after consulting with the MOT. The relevant port authority collects the tariffs. Terminal handling charges (THCs) are charges the terminal operators for cargo movement and stevedoring services performed at a terminal. For container terminals, THCs cover the movement of a container between a ship's hold to the exit–entry gate via the container terminal yard. Actual THCs vary from port to port, as the charges are part of a complete package negotiated with the government; also, the cost of handling depends on the contractual agreement between terminal operators and the relevant shipping line (footnote 3).

4.2 Typical Risk Allocations for Public–Private Partnership Port Projects

The typical allocations of the risks associated with port sector PPP projects are shown in Table 22.

Table 22: Risk Allocations to the Public and Private Sectors for Port Projects, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand risk	✓			It is common practice in the port sector to have the private sector partner shoulder this risk.
Competition risk (exclusivity)		✓		
Tariff implementation or escalation risk			✓	In cases of extreme fluctuations in the inflation and interest rates, the risk can be shared with the public sector.
Environmental and social risk			✓	Environmental permits required during project preparation are the responsibility of the public sector. The private sector partner takes responsibility for obtaining environmental and social permits, and for obligations under the PPP agreement.
Permits			✓	Permits required during project preparation are the responsibility of the public sector. Construction and operation permits are the private sector partner's responsibility.
Geotechnical risk	✓			The private sector is typically responsible for assessing and addressing the risks associated with site-specific conditions; this includes the conduct of geotechnical surveys.

PPP = public–private partnership.

✓ = Yes.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

4.3 Financing Details of Public–Private Partnerships in the Port Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	1	1	1
PPP projects that received export credit agency/ international financing institution support	1	1	1
Typical debt:equity ratio	70:30	70:30	70:30
Time for financial closure	6 months	6 months	6 months
Typical concession period	25–30 years	25–30 years	25–30 years
Typical Financial Internal Rate of Return	12%–16%	12%–16%	12%–16%

PPP = public–private partnership.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).; Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019.* Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

5. Challenges in the Port Sector

- The historical dominance of state-owned enterprises (SOEs)—PT Pelabuhan Indonesia I, II, III, and IV, also referred to as Pelindo I, II, III, and IV—in port development and operations has resulted in the Pelindos acquiring significant influence and power, which has caused uncertainty among potential investors. Although Shipping Law 2008 calls for an independent port authority, its enforcement still needs to be strengthened. There is a lack of clarity regarding the Pelindos' roles as regulators or operators in cases where any of these companies are in a joint venture with foreign operators (footnote 3).
- It is unclear whether partnerships with Pelindos could be considered PPPs.
- According to MOT Regulation No. 15 of 2015, the government can participate in PPPs in the port sector, but there is no specific regulation about the modality of the PPPs in this sector.
- There is a need to develop sufficient infrastructure on land to support the ports.

AIRPORTS

Parameter	Value	Unit of Measurement
Airports	673	Number
Total passenger capacity	115.15	Million passengers
Quality of air transport infrastructure	4.90	1 (lowest)–7 (highest)
Total number of projects with cumulative lending, grant, and technical assistance commitments in the transport sector	90	Number
Total value of cumulative lending, grant, and technical assistance commitments in the transport sector	3,702	$ million

Sources: World by Map. Airports. https://www.citypopulation.de/en/world/bymap/Airports.html; World Bank. Data. Air Transport, Passengers Carried – Bangladesh, Cambodia, Georgia, Kazakhstan, Myanmar, Pakistan, Papua New Guinea, Sri Lanka, Uzbekistan, Vietnam, China, India, Indonesia, Philippines, Thailand. https://data.worldbank.org/indicator/IS.AIR.PSGR?locations=BD-KH-GE-KZ-MM-PK-PG-LK-UZ-VN-CN-IN-ID-PH-TH; TheGlobalEconomy.com. Compare Countries with Annual Data from Official Sources. https://www.theglobaleconomy.com/compare-countries/; and ADB Data Library. Cumulative Lending, Grant, and Technical Assistance Commitments. https://data.adb.org/dataset/cumulative-lending-grant-and-technical-assistance-commitments.

1. Contracting Agencies in the Airport Sector

Two state-owned companies manage and operate all the major airports in the country: PT Angkasa Pura I and PT Angkasa Pura II. These companies are wholly owned by the government and are regulated by the Directorate General of Civil Aviation (DGCA), which is part of the MOT. PT Angkasa Pura I manages 13 airports, and PT Angkasa Pura II manages 16 airports.[33]

The first PPP project for airport development was awarded at the end of 2019 and early 2020. The consortium of PT Cardig Aero Service (CAS Group), an air transportation services company, and Changi Airports International (CAI), a subsidiary of Singapore's Changi Airport Group, won the PPP tender for the Komodo International Airport expansion project. The concession was awarded by the MOT.

[33] PT Angkasa Pura I. 2018. *Growing Steadily to Enter Global Class Standard: Annual Report 2018.* Jakarta. https://ap1.co.id/contents/file/616-AP1_AnnualReport2018.pdf; PT Angkasa Pura II. https://www.angkasapura2.co.id/en/.

2. Airport Sector Laws and Regulations

The key sector-specific regulations include:

- Civil Aviation Act of 2009, Act No.1 of 2009
- Government Regulation No. 40 of 2012 on Airport Construction and Environmental Preservation (footnote 3)

The International Civil Aviation Organization publishes a number of regulations that airport operators are required to adopt in order to ensure safe and secure air transport operations. This includes Annex 14, which sets out the physical requirements for any type of civil airport in order for it to receive an operating license from the DGCA. It also includes Annex 17, which deals with various security measures to safeguard the aviation industry against acts of unlawful interference. The MOT and the DGCA are responsible for implementing and monitoring compliance with these regulations (footnote 3).

Member governments of the Association of Southeast Asian Nations (ASEAN) have agreed in principle to implement the ASEAN Single Aviation Market. However, many regional and local airports are not open to direct flights to and from other ASEAN countries.

The key government agencies in the airport sector are listed and described in Table 23.

Table 23: The Key Government Agencies in Indonesia's Airport Sector

Agency	Function
Ministry of Transportation – DGCA	The DGCA is the main regulator of airports and aviation in Indonesia. It is responsible for developing and implementing policies, as well as norms, standards, procedures, and criteria regarding the use of air space, aircraft, and airports; the organization of air transport and air navigation; and safety, security, and environmental quality. The DGCA also acts as the airport authority in terms of supervising aviation activities at airports, including the regulation of airport services and operations. In addition, the DGCA is responsible for the certification and licensing of air transportation, airports, flight security, air navigation, aircraft airworthiness, and operations.
AirNav Indonesia	AirNav Indonesia is the national air traffic control provider, and its main business includes the provision of air traffic services, aeronautical telecommunications, dissemination of aeronautical information, as well as search-and-rescue information and aviation meteorology information.
AVSEC Airport Security	Formed by PT Angkasa Pura (as the only airport operator), AVSEC Airport Security provides security services and meets international and national rules with regard to the provision of security services at airports.

AVSEC = Aviation Security, DGCA = Directorate General of Civil Aviation.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

2.1 Foreign Investment Restrictions in the Airport Sector

The maximum equity investment allowed for foreign investors in greenfield projects in the airport sector has been 49%.

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects	49%	49%	49%

Source: Government of Indonesia, Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

2.2 Standard Contracts in the Airport Sector

Type of Contract	Availability
PPP/concession agreement	×
Performance-based operation and maintenance contract	×
Engineering procurement and construction contract	✓

O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

3. Airport Sector Master Plan

There are no details on the sector master plan for airports available in English. The PPP Book 2019, published by the Ministry of National Development Planning (BAPPENAS), highlights that one project that is in the pipeline: Expansion of Hang Nadim International Airport Passenger Terminal.

In accordance with the Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, BAPPENAS issues its PPP Book every year to provide information on the PPP projects available for investment in Indonesia.[34] The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on the PPP Book 2019, the PPP projects in the pipeline for the airport sector are listed in Table 24.

Table 24: Pipeline of Public–Private Partnership Airport Projects

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Construction Start
		($ million)	(Rp trillion)			
Expansion of Hang Nadim International Airport Passenger Terminal	Ready to offer	275	3.8	2019	2019	2020
Expansion of Komodo International Airport	Already tendered	210	2.9	2018	2019	2020

Rp1 = $0.00007201, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download.

The PPP Book also provides information on prospective PPP infrastructure projects in the Indonesian airport sector. These projects have a high possibility of being included in the PPP pipeline in the future, in either the under-preparation or ready-to-offer category, after passing the evaluation and satisfying administration criteria. A list of prospective PPP airport projects according to PPP Book 2019 is provided in Table 25.

[34] BAPPENAS. *Infrastructure Projects Plan in Indonesia 2019*. https://library.pppknowledgelab.org/documents/5826/download.

Table 25: Prospective Public–Private Partnership Airport Infrastructure Projects

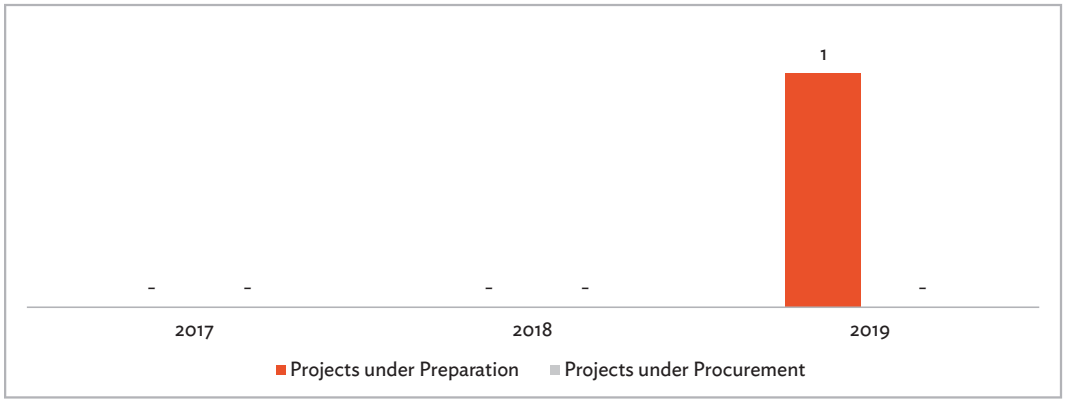
Project Name	Government Contracting Agency
Singkawang Airport	Ministry of Transportation
Tarakan Airport	Ministry of Transportation
North Bali Airport	Ministry of Transportation
Waisai Airport	Ministry of Transportation
Water Aerodrome (water-based airport)	Ministry of Transportation
Airplane Repair Maintenance Overhaul Center	Ministry of Transportation
Mengwi Terminal Type A	Ministry of Transportation
Central Java Terminal Type A (10 locations)	Ministry of Transportation
Kembang Putih Terminal Type A, Tuban, East Java	Ministry of Transportation
Bimuku Terminal Type A, Kupang, East Nusa Tenggara	Ministry of Transportation
Singkawang Terminal Type A, Singkawang, West Kalimantan	Ministry of Transportation

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia.

3.1 Projects under Preparation and Procurement in the Airport Sector

Figure 34 presents the number of PPP projects which are under preparation and procurement in the airport sector in Indonesia.

Figure 34: Public–Private Partnership Airport Projects under Preparation and Procurement



Note: "-" includes: no projects, data not available, or not applicable.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*. Jakarta, Indonesia (3 years: 2017–2019).

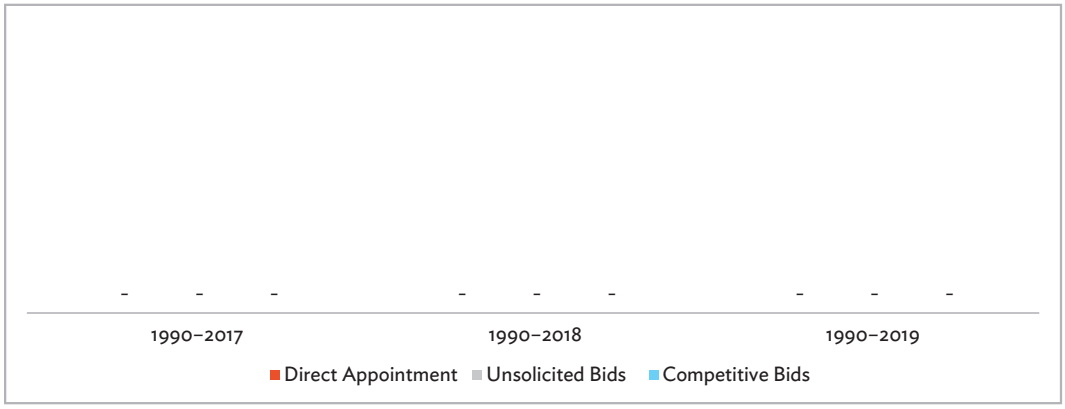
https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

The one project under preparation, according the PPP Book 2019, was Expansion of Hang Nadim International Airport Passenger Terminal.

4. Features of Past Public–Private Partnership Projects

Figure 35 shows the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the airport sector in Indonesia

Figure 35: Modes of Procurement for Public–Private Partnership Airport Projects



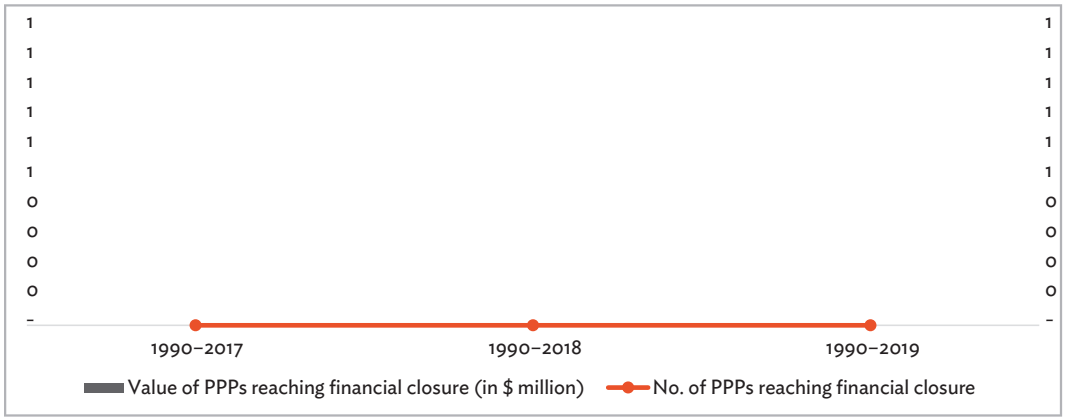
Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Private Participation in Infrastructure (PPI) database. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

The Komodo International Airport expansion project has not yet achieved financial closure, so it is still not included in the World Bank PPI database.

Figure 36 presents the number of PPP projects which have reached financial closure and the total value of those projects in the airport sector in Indonesia.

Figure 36: Public–Private Partnership Airport Projects Reaching Financial Closure



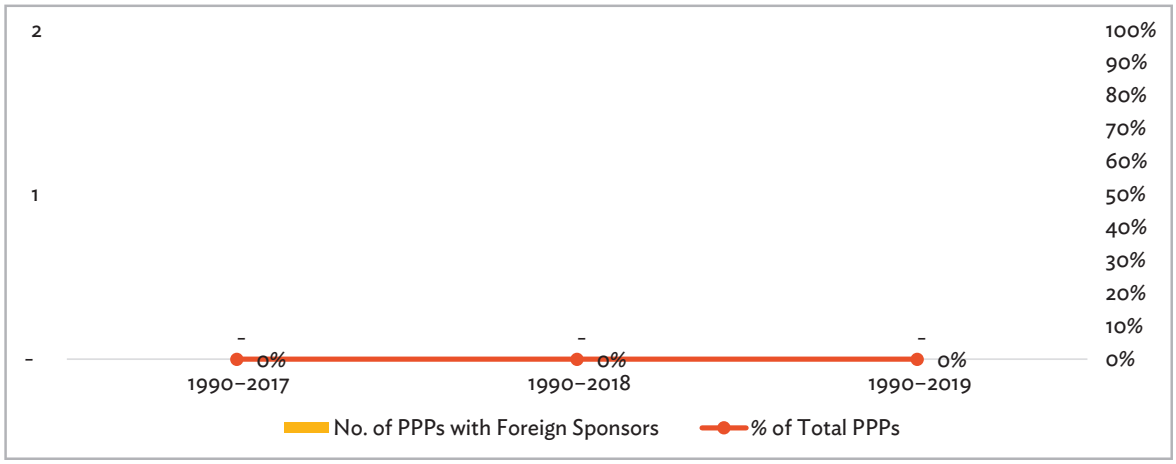
PPP = public–private partnership.

Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 37 shows the number of PPP projects which have received foreign sponsor participation in the airport sector in Indonesia.

Figure 37: Public–Private Partnership Airport Projects with Foreign Sponsor Participation



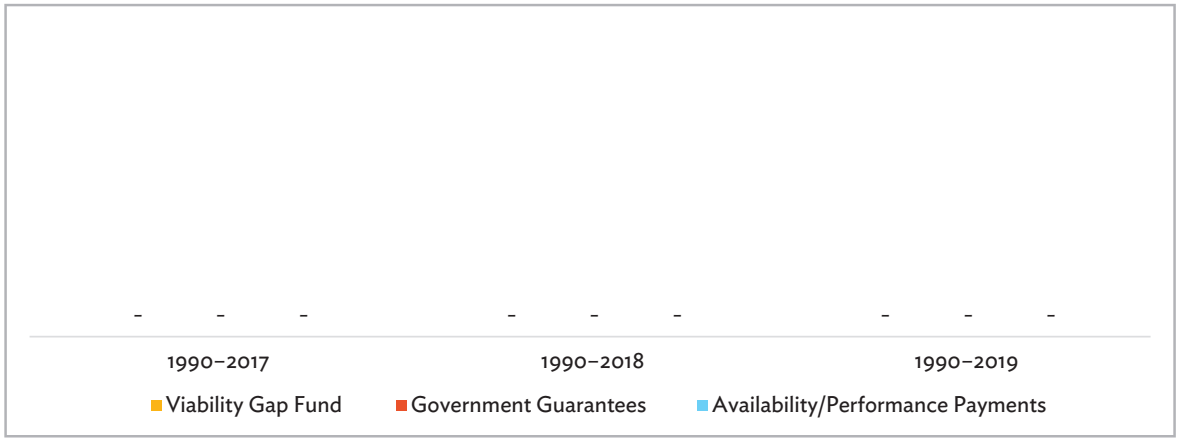
PPP = public–private partnership.

Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 38 shows the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the airport sector.

Figure 38: Government Support to Public–Private Partnership Airport Projects

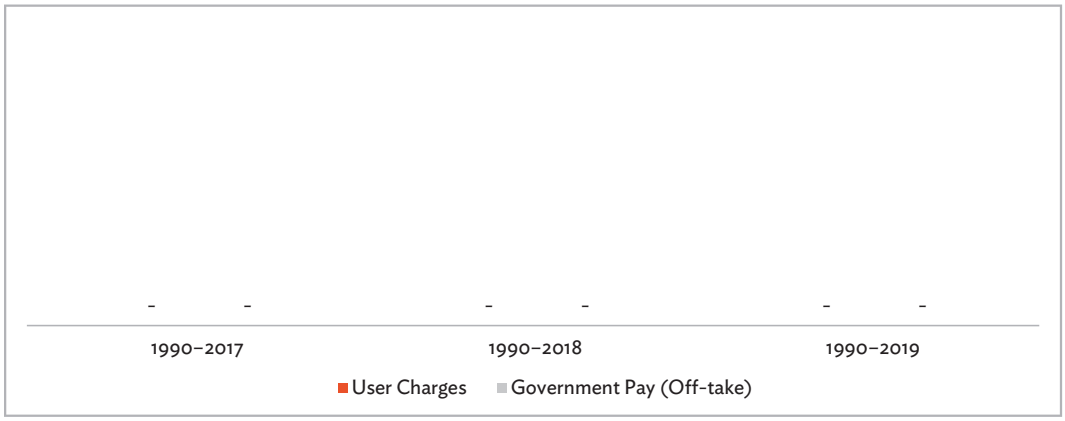


Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 39 presents the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the airport sector in Indonesia.

Figure 39: Payment Mechanisms for Public–Private Partnership Airport Projects



Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Airport Sector

The operator of the Komodo International Airport will collect user charges for aeronautical and non-aeronautical services over a 25-year concession period.

4.2 Typical Risk Allocations to Public–Private Partnership Airport Projects

Based on the indicative PPP project structures for Komodo International Airport, the typical allocation of risks associated with for PPP projects in the airport sector is shown in Table 26.

Table 26: Risk Allocations to the Public and Private Sectors for Airport Projects, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand	✓			The demand risk, the tariff risk, and the revenue collection risk are with the private sector.
Revenue collection	✓			
Tariff	✓			
Government payment				Not Applicable
Environment and social			✓	
Land acquisition		✓		Land acquisition is a slow and complex process in Indonesia; the private sector has no appetite to take the land acquisition risk.
Interface			✓	
Handover			✓	
Political			✓	
Foreign exchange (FOREX)			✓	

✓ = Yes.

4.3 Financing Details of Public–Private Partnerships in the Airport Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	UA	UA	UA
PPP projects that received export credit agency/international financing institution support	UA	UA	UA
Typical debt:equity ratio	UA	UA	UA
Time for financial closure	9–12 months	9–12 months	9–12 months
Typical concession period	25 years	25 years	25 years
Typical Financial Internal Rate of Return	11%–18%	11%–18%	11%–18%

PPP = public–private partnership, UA = Unavailable

Sources: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia. https://library.pppknowledgelab.org/documents/5826/download; World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the Airport Sector

The key challenges for the sector include the following:

- The state-owned enterprises (SOEs) PT Angkasa Pura I and II are undertaking the expansion of existing airports, while proposals for new airports are either being implemented or are being planned. The lack of sufficient funding for upgrading existing airports or building new ones has been an obstacle.
- The dominance of the PT Angkasa Pura SOEs in airport development and operation creates a lack of certainty with regard to potential investors.
- Foreign ownership of airports is not possible in Indonesia under Law No. 1 of 2009 on Aviation, which states that foreign investors cannot own a majority stake in an Indonesian airport. While there are ways of securing some level of foreign participation in infrastructure assets where this restriction applies—for example, by forming a joint venture with an Indonesian SOE, as has been done in the port sector—there are no such examples in the airport sector. As airports require significant capital expenditure over a long-term period, the current lack of transparency and certainty with regard to operating in Indonesia as a foreign company, as well as the fact that Angkasa Pura I and II together have full control over the country's major airports, further limits the ability of Indonesia to establish such partnerships.
- The process of acquiring new land for airport expansion is very slow; as a result, a number of airport projects have been significantly delayed (footnote 3).

ENERGY

Parameter	Value	Unit of Measurement
Electric power consumption	812	kWh per capita
Share of clean energy	36.88	% of total energy use
Access to electricity	99	% of population

continued on next page

continued from previous page

Parameter	Value	Unit of Measurement
Getting electricity	87.30	Score out of 100
Energy imports	(103.09)	% of total energy Use
Investment in energy with private participation[a]	8,069	$ million
Total number of projects with cumulative lending, grant, and technical assistance commitments in the energy sector	102	Number
Total value of cumulative lending, grant, and technical assistance commitments in the energy sector	7,300	$ million

kWh = kilowatt-hour.

Note: () = negative.

Sources: The Economist intelligence Unit. Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure. https://infrascope.eiu.com/; TheGlobalEconomy.com. Share of Clean Energy – Country Rankings. https://www.theglobaleconomy.com/rankings/Share_of_clean_energy/; World Bank. Data. Access to Electricity (% of Population) – Myanmar, Cambodia, Uzbekistan, China, Bangladesh, Georgia, India, Indonesia, Kazakhstan, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam. https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?end=2018&locations=MM-KH-UZ-CN-BD-GE-IN-ID-KZ-PK-PH-LK-TH-VN&start=2018&view=bar; World Bank. Ease of Doing Business Scores. https://www.doingbusiness.org/en/data/doing-business-score?topic=getting-electricity; TheGlobalEconomy.com. Energy Imports – Country Rankings. https://www.theglobaleconomy.com/rankings/Energy_imports/; ADB Data Library. Cumulative Lending, Grant, and Technical Assistance Commitments. https://data.adb.org/dataset/cumulative-lending-grant-and-technical-assistance-commitments.

1. Contracting Agencies

The contracting agencies involved in the energy sector include the following:

- The state-owned electricity company PT Perusahaan Listrik Negara (PLN) is responsible for the management and development of power generation, transmission, and distribution in Indonesia. PLN is supervised from a technical perspective by the Ministry of Energy and Mineral Resources (MEMR), and from a management perspective by the Ministry of State-Owned Enterprises and the Ministry of Finance (MOF).
- PLN controls more than half of the power-generating assets and is the sole owner of the electricity distribution and transmission assets in the country. PLN also has the right of first refusal on all new generation capacity, is the provider of electricity of last resort, and holds an electricity supply business permit.
- The government has emphasized the need to increase the participation of the private sector in the power generation space. This is further reiterated in the RPJMN 2020–24 plan (footnote 3).

2. Sector Laws and Regulations

The power sector is regulated by the MEMR and its subagencies: the Directorate General of Electricity and the Directorate General of New and Renewable Energy and Energy Conservation. The key sector regulation is Law No. 30 of 2009 on Electricity (the Electricity Law) and its implementing regulation: Government Regulation No. 14 of 2012 on Electricity Supply Business (as amended by Government Regulation No. 23 of 2014), which provides a greater role for the regional governments in the sector. Governmental Regulation No. 42 of 2012 on Cross-Border Power Purchase and Government Regulation No. 62 of 2012 on Electricity Support Business are also supporting elements for the Electricity Law. Furthermore, the guidelines on the use of domestic products in the construction of electricity infrastructure are dictated by the Ministry of Industry Regulation No. 54/M-IND/PER/3/2012 (as amended by Ministry of Industry Regulation No. 05/M-IND/PER/2/2017), which stipulates the minimum percentage of local content (footnote 3).

The geothermal energy sector is mainly regulated by Law No. 21 of 2014 on Geothermal and Government Regulation No. 7 of 2017 on Indirect Use of Geothermal. The tariffs for renewable energy and thermal energy are under the regulation of the MEMR. The MEMR also has other regulations, such as:

- Presidential Regulation No. 4 of 2016 (Article 14) on Acceleration of Power Infrastructure Development, prioritizes the use of new and renewable energy (with the national government and/or subnational governments possibly giving support in the form of fiscal incentives, simplification of the process of getting permits, subsidies, etc.);
- Presidential Regulation No. 66 of 2018 on the Second Amendment to Presidential Regulation No. 61 of 2015 on Collection and Use of Palm Oil Plantation Funds, which mandates the use of biodiesel for Public Service Obligation (PSO) and Non-PSO sectors;
- Minister of Finance Regulation No.177/PMK.011/2007 on Free Duty on Imported Goods for Upstream Oil and Gas Business and Geothermal;
- Minister of Finance Regulation No. 03/PMK.011/2012 on Procedures for Management and Accountability of Geothermal Fund Facilities;
- Minister of Energy and Mineral Resources Regulation No. 49 of 2017, as the refinement of Minister of Energy and Mineral Resources Regulation No.10 of 2017 on Principles in Electricity Sales and Purchase Agreement;
- Minister of Energy and Mineral Resources Regulation No. 50 of 2017, as the revision of Minister of Energy and Mineral Resources Regulation No. 12 of 2017 on Renewable Energy Utilization for Electricity Supply, to create a better investment climate by promoting energy efficiency and affordable electricity; and
- Minister of Energy and Mineral Resources Regulation No.49 of 2018 on the Utilization of Roof Top Solar PV by PT Perusahaan Listrik Negara (PLN) Consumer.

Table 27 lists and describes the regulatory authorities in Indonesia concerned with the energy sector.

Table 27: Energy-Related Regulatory Authorities in Indonesia

Agency	Function
Ministry of Energy and Mineral Resources	This is the principal actor in the governance of the energy and mining sector. It oversees policy making, policy implementation, and the development of technical policies; manages energy and mining assets; and evaluates the performance of the sector. The ministry develops the National Electricity Plan and prepares laws and regulations on electricity-related national tariff and subsidy policies.
National Energy Council	Established in 2009 as the principal energy coordination body, the National Energy Council brings together the seven ministries that are directly or indirectly involved in the energy sector.
Ministry of Finance	The Ministry of Finance manages the state's fiscal and financial assets and properties, and formulates the state budget, as well as taxation, customs, and excise policies. With regard to energy, the ministry is engaged in the management of energy subsidies; the setting of renewable energy tariffs; and the taxation of energy products, energy infrastructure, and operations.
Ministry of Environment and Forestry	This ministry establishes and enforces environmental standards and regulations, and sets the environmental standards for resource extraction in the coal mining, oil, and gas sectors. It also grants forestry borrow-to-use permits to provide power to plant developers if their plants are to be located in a forest.
Commission VII of the Indonesian House of Representatives	This is the principal parliamentary body dealing with energy matters. It reviews and approves the National Energy Policy, as well as any changes in Indonesia's electricity and fuel subsidies.

Source: ADB. 2019. *Public–Private Partnership Monitor (second edition).* Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

2.1 Foreign Investment Restrictions

Presidential Regulation No. 44 of 2016 imposes maximum limits on foreign ownership of various aspects of the energy business, as shown below. For instance, power generation projects above 10 megawatts (MW) can be 100% foreign owned during the concession period, provided that the projects were developed under a PPP scheme. This regulation is currently under review (footnote 3).

Business Activity	Maximum % of FDI Allowed
Power generation	100%
Power transmission	100%
Power distribution	100%
Oil and gas	75%

FDI = foreign direct investment.

Source: Government of Indonesia. Presidential Regulation No. 44 of 2016 on Lists of Fields That Are closed to and Business Fields That Are Open with Conditions to Investment.

2.2 Standard Contracts

PLN does not use a standard form of power purchase agreement (PPA), unless it is for a renewable energy project. The form of the PPA differs from project to project, though most projects have similar risk allocations. The general principles of a PPA are currently set out in MEMR Regulation No. 10 of 2017 on Principles of Power Purchase Agreements, as last amended by MEMR Regulation No. 10 of 2018. The types of risks allocated under a PPA generally include

- natural force majeure,
- government force majeure,
- power-load requirements,
- limits of transmission capability,
- fuel availability,
- land acquisition issues, and
- generator performance (footnote 3).

PLN will usually try to impose the relevant standard PPA form and limit changes to key commercial and bankability points. However, there is some degree of variation among individual PPAs on such key commercial and bankability points, depending on the risk profile of the projects and the bargaining power of the sponsors and lenders (footnote 3).

Currently, all renewable energy projects in Indonesia are developed under the build–operate–own–transfer (BOOT) scheme, in which PLN is the sole offtaker of the electricity produced. The independent power producers (IPPs) own and operate the production facilities for a limited period, as mentioned in the PPA with PLN.[35]

[35] Power Technology. *Solar Companies Struggle with Renewable Energy Policy in Indonesia.* https://www.power-technology.com/comment/solar-power-indonesia/.

Table 28: Availability of Standard Public–Private Partnership Contracts in the Energy Sector

Type of Contract	Availability
Power purchase agreement	✓
Capacity take-or-pay contract	✓
Fuel supply agreement	✓
Transmission and use-of-system agreement	×
Engineering procurement and construction contract	✓

✓ = Yes, × = No.

3. Energy Sector Master Plan

The master plan for the energy sector can be described as follows:

- Indonesia power plant capacity in 2018 reached 64.5 gigawatts (GW), a 3% increase over 2017. The power plant capacity in 2018 was dominated by fossil fuel power, especially coal (50%), followed by gas (29%), biofuel (7%), and renewable energy (14%).
- The National Energy Council prepared the Electricity Supply Business Plan (RUPTL) 2019–2028. The plan calls for an additional 56.60 GW of power capacity, provided by projects to be completed by 2028. IPPs have been allocated power projects that will deliver a total capacity of 33.67 GW, while the state-owned PLN is slated to build power plants delivering approximately 16.24 GW. By 2025, the energy mix is expected to include about 54% from coal, 23% from new and renewable sources, and 22% from gas and biofuel. By 2028, the proportion of renewable energy sources is expected to increase marginally, to 23.2%. Among the renew able energy sources, hydro and mini-hydro power plants are projected to account for the largest portion (9.7 GW), followed by geothermal power plants (4.6 GW). The electricity obtained from rooftop solar photovoltaic panels is projected to be 3,200 MW. Indonesia is the world's largest producer of crude palm oil, and the use of the B20 biodiesel blend is mandatory for all sectors outlined in the RUPTL. This policy was introduced in September 2018.
- In fulfilling the government's 100% electrification program by 2020, primarily to provide electricity in Indonesia's far-flung areas that are still off the national grid, the RUPTL has outlined the use of communal solar electricity stations, photovoltaic towers, and solar home systems. Utilizing mobile power plants (barge- as well as truck- mounted and in containers) remains a short-term solution for meeting electricity demand in parts of eastern Indonesia.
- To improve power project operations efficiency, PLN is piloting the implementation of Smart Grid, utilizing advanced metering infrastructure, and continues to implement the load frequency control and automatic generation control for the Java–Bali system.
- For the future growth of the IPPs' role in Indonesia's power supply, PLN will continue to assign its subsidiaries ownership shares in selected IPP power projects in a build–operate–transfer (BOT) scheme whereby the ownership of the power plants built and owned by IPPs will be transferred to PLN upon the expiry of the PPA. The development of transmission lines may involve private parties through a build–lease–transfer or power- wheeling scheme.

- In support of the government's plan to develop the Indonesian electric-vehicle industry, PLN is developing a national standard for electric-vehicle charging specifications, and is preparing a road map for electric-vehicle charging stations.[36]

Table 29: Production Capacity of Various Types of Energy Plants, 2019–2028 (MW)

Type of Plant	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	Total
Coal power plant	514	5,491	2,550	1,224	2,415	2,025	710	-	-	-	14,929
Mine mouth coal power plant	-	-	840	1,200	1,550	400	200	200	500	800	5,690
Geothermal power plant	190	151	115	340	235	170	1,759	-	55	45	3,060
Combined cycle, gas and coal power plant	35	-	275	2,190	1,180	300	-	-	-	300	4,220
Gas mobile power plant	-	-	-	20	-	-	-	-	-	-	20
Micro hydropower plant	140	229	469	185	147	193	9	20	20	10	1,422
Hydropower plant	154	173	710	-	30	-	1,682	129	62	200	3,139
Other types of renewables power plant	57	204	246	347	155	106	14	5	12	40	1,186
Total	**1,090**	**6,247**	**5,205**	**5,446**	**5,712**	**3,195**	**4,347**	**354**	**649**	**1,395**	**33,666**

- = data not available, MW = megawatt.

Source: Government of Indonesia, National Energy Council.

The Committee for Acceleration of Priority Infrastructure Delivery (KPPIP) includes the following initiatives in its list of priority projects:

- Central Java Power Plant (Batang Steam Power Plant), with an estimated project cost of Rp40 trillion (approximately $2.9 billion);
- Gas Power-Based Power Plant, with an estimated project cost of Rp302 trillion (approximately $21.7 billion), to be developed by IPPs and the Ministry of State-Owned Enterprises;
- Mulut Tambang Steam Power Plant, with an estimated project cost of Rp210.8 trillion (approximately $15.2 billion), to be developed by IPPs and the Ministry of State-Owned Enterprises; and

[36] Government of Indonesia, National Energy Council, Secretariat General. 2019. *Indonesia Energy Outlook 2019*. Jakarta. https://www.esdm.go.id/assets/media/content/content-indonesia-energy-outlook-2019-english-version.pdf; B. Bernarto. 2019. Indonesia Announces New Electricity Procurement Plan. *Norton Rose Fulbright*. February. https://www.nortonrosefulbright.com/en-us/knowledge/publications/66c608e1/indonesia-announces-new-electricity-procurement-plan.

- Waste-to-energy projects in cities such as Jakarta, Tangerang, Bandung, Surakarta, Semarang, Surabaya, Makassar, and Denpasar, as priority projects to be developed in the PPP mode and though state-owned enterprises (SOEs). The estimated project cost is Rp19.74 trillion (approximately $1.4 billion).[37]

In accordance with the Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, the Ministry of National Development Planning (BAPPENAS) issues its PPP Book every year to provide information on the PPP projects available for investment in Indonesia (footnote 34). The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on the PPP Book 2019, the PPP projects in the pipeline for the energy sector are listed in Table 30.

Table 30: Pipeline of Public–Private Partnership Energy Projects

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Construction Start
		($ million)	(Rp billion)			
Surakarta Street Lighting[a]	Under preparation	.9 (10 years) 2.4 (20 years)	12.5	2019	2020	2020

Rp = Indonesian rupiah (national currency).

[a] Street lighting is classified under the energy conservation subsector.

Source: Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP). 2019. *KPPIP Semester 2 2019 Report*. Jakarta.

The PPP Book also provides information on prospective PPP infrastructure projects in the Indonesian energy sector. These projects have a high probability of being included in the PPP pipeline in the future, either in the under-preparation or ready-to-offer category, after passing the evaluation and satisfying the administrative criteria. A list of prospective energy-sector projects according to the PPP Book 2019 is provided in Table 31.

Table 31: Prospective Public–Private Partnership Energy Infrastructure Projects

Project Name	Government Contracting Agency
Household Gas Pipeline System	Ministry of Energy and Mineral Resources
Off-Grid Mini and Micro Hydro Power Plant	Ministry of Energy and Mineral Resources

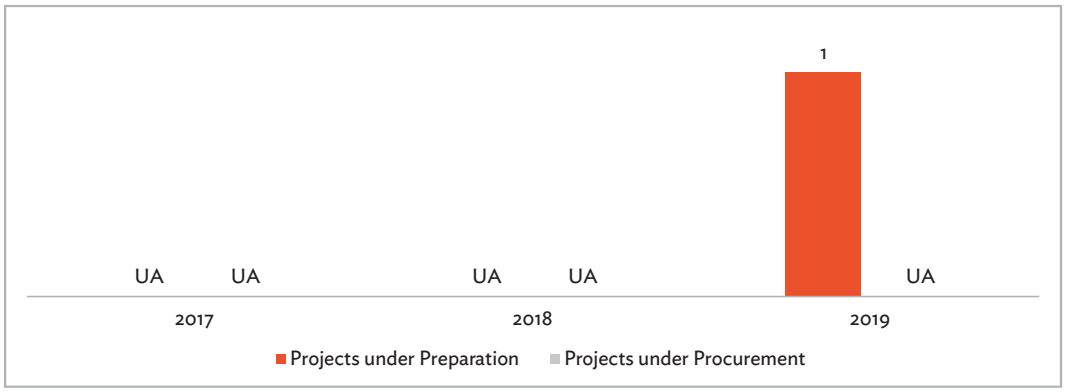
Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia.

3.1 Projects under Preparation or Procurement

Figure 40 shows the number of PPP projects which are under preparation and procurement in the energy sector.

[37] Government of Indonesia, Committee for Acceleration of Priority Infrastructure Delivery (KPPIP). 2019. *KPPIP Semester 2 2019 Report*. Jakarta.

Figure 40: Public–Private Partnership Projects under Preparation and Procurement, 2017–2019



UA = Unavailable

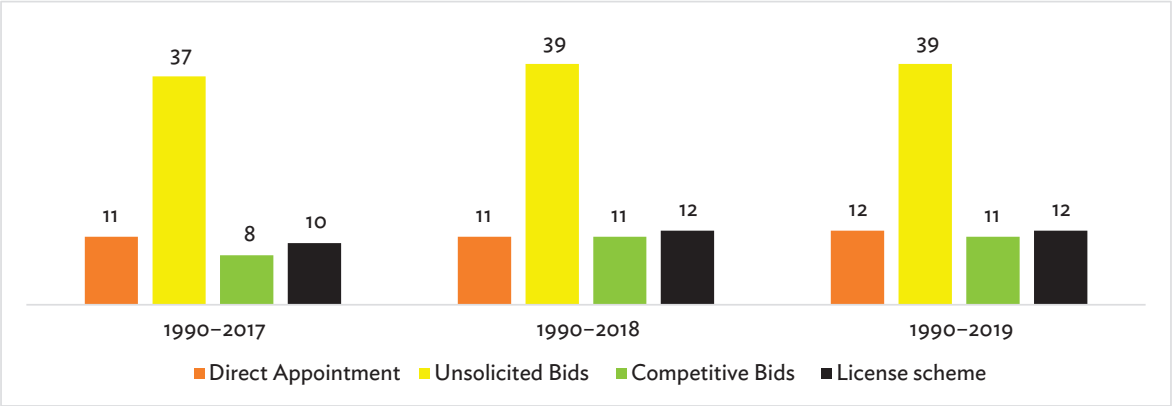
[a] There are no available data for projects under preparation or procurement in 2017 and 2018.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta, Indonesia (3 years: 2017–2019). https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

4. Features of Past Public–Private Partnership Projects

Figure 41 shows the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the energy sector in Indonesia

Figure 41: Modes of Procurement for Public–Private Partnership Energy Projects



Notes:

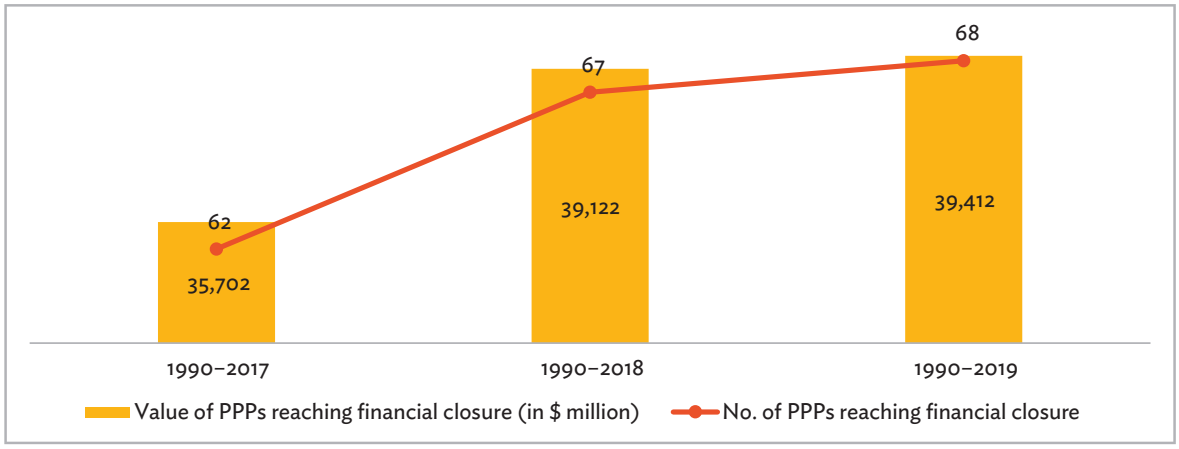
1. Only active projects are considered in the above graph.
2. "Competitive bids" includes projects awarded on a licensed basis.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Under the competitive tender methods, the key bidding parameter is the price at which providers are willing to sell the electricity generated. The request for proposals (RFPs) issued by PLN generally contains a draft form of a PPA and other relevant project agreements, such as a draft guarantee agreement (if the project is being tendered under a PPP program). Bidders are often able to submit a completed PPA form (and other forms provided by PLN) before the submission of their bids (footnote 3).

Figure 42 shows the number of PPP projects which have reached financial closure and the total value of those projects in the energy sector.

Figure 42: Independent Power Producer/Public–Private Partnership Energy Projects Reaching Financial Closure



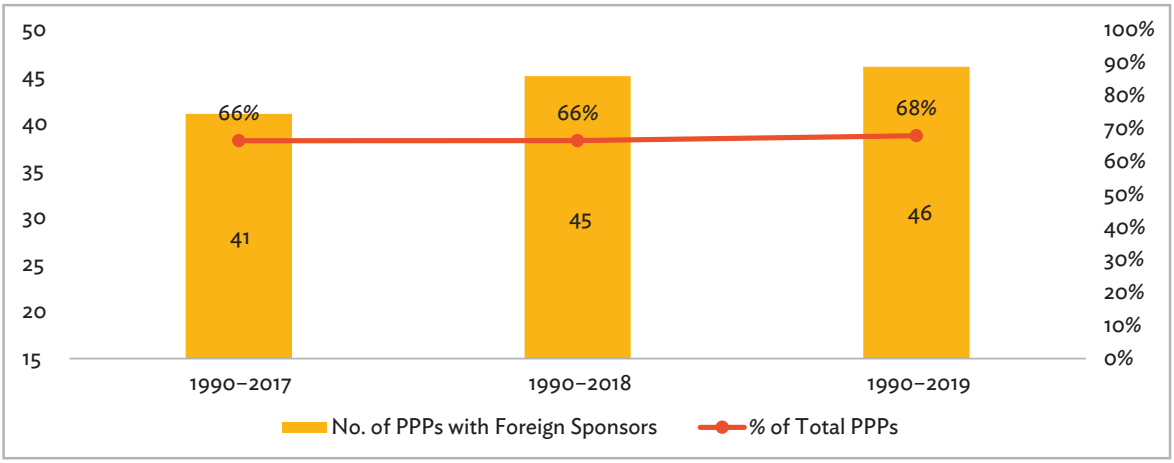
PPP = public–private partnership.

Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 43 presents the number of PPP projects which have received foreign sponsor participation in the energy sector in Indonesia.

Figure 43: Independent Power Producer/Public–Private Partnership Energy Projects with Foreign Sponsor Participation



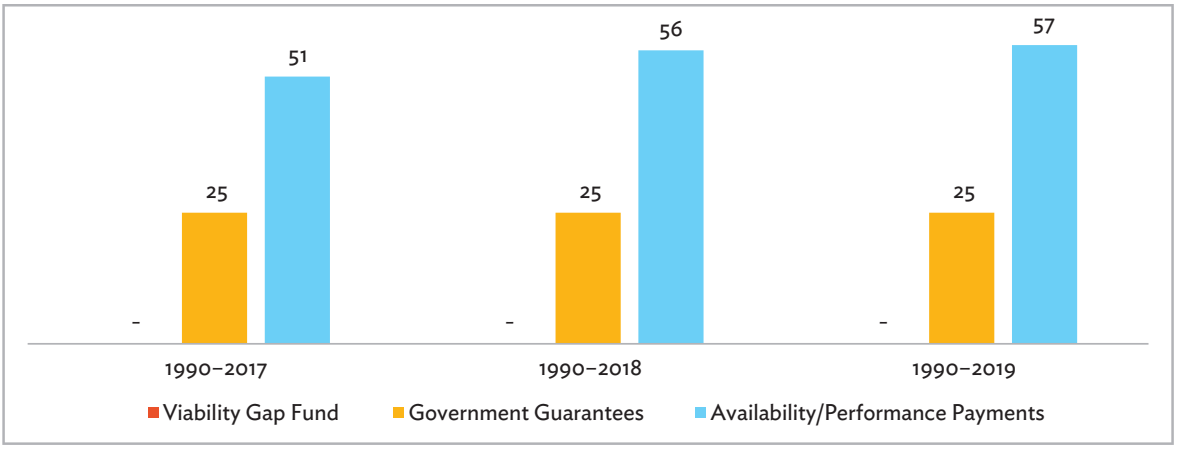
PPP = public–private partnership.

Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 44 shows the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the energy sector in Indonesia.

Figure 44: Government Support to Public–Private Partnership Energy Projects



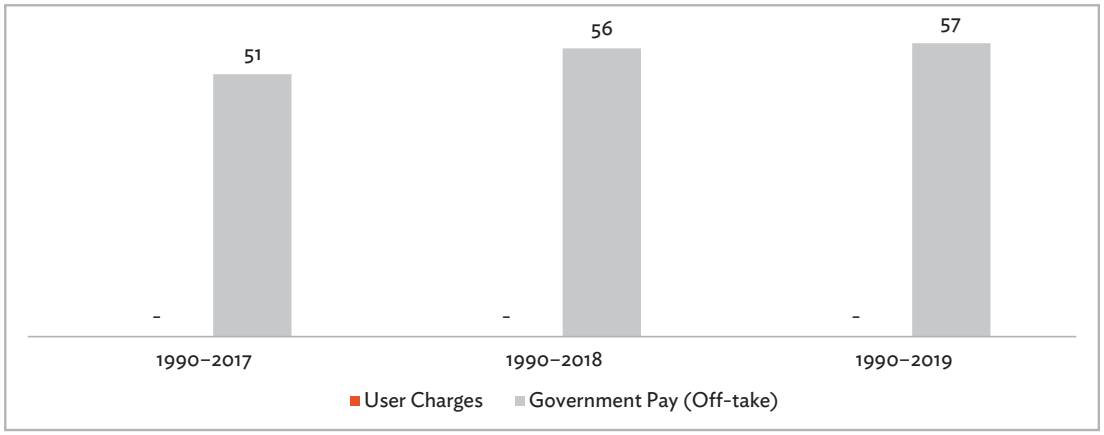
Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Developers are typically expected to acquire all the land they need for the plant site and for the interconnecting lines to the grid, which could be along a long-distance corridor. The latest PPP regulation (No. 38 of 2015) allows the government to procure land for certain PPP projects, including projects in the energy sector. An example of increased government support for an IPP project is the Java 7 coal-fired power plant project, which achieved financial closure in 2016, after PLN acquired the land for the project in return for an equity stake in the IPP (footnote 3).

Figure 45 presents the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the energy sector in Indonesia.

Figure 45: Payment Mechanisms for Public–Private Partnership Energy Projects



Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Energy Sector

Among others, Ministry of Energy and Mineral Resources (MEMR) Regulation No. 50 of 2017 (on the Utilization of Renewable Energy for Power Supply) and MEMR Regulation No. 19 of 2017 (on the Utilization of Coal for Power Generation and Purchase of Excess Power) regulate the benchmark purchase prices for various types of energy sources (footnote 3).

The feed-in tariff, a fixed price paid to renewable energy producers for each unit of energy they inject into the electricity grid, varies according to the unit capacity and the heat rate, as shown in Table 32.

Table 32: Feed-In Tariffs, by Type of Energy Producer

Type of Independent Power Producer	Determinants of Tariffs
Solar	• If local BPP > national BPP = 85% of local BPP • If local BPP ≤ national BPP = By agreement of the parties
Wind	
Hydropower	• If local BPP > national BPP = 100% of local BPP • If Sumatra, Java, and Bali: BPP ≤ national BPP = By agreement of the parties
Biomass and biogas	• If local BPP > national BPP = 85% of local BPP • If local BPP ≤ national BPP = By agreement of the parties
Urban waste	• If local BPP > national BPP = 100% of local BPP • If Sumatra, Java, and Bali: BPP ≤ national BPP = By agreement of the parties
Geothermal	
Sea water	• If local BPP> national BPP = 100% of local BPP • If Sumatra, Java, and Bali: BPP ≤ national BPP = By agreement of the parties

BPP = best practice price.

Source: PT Sarana Multi Infrastruktur (Persero). 2019. SMI Insight – Renewable Energy Commercial Review. Jakarta, Indonesia. *https://ptsmi.co.id/wp-content/uploads/2019/11/SMI-Insight-2019-Renewable-Energy-Commercial-Review.pdf*.

The government has set tariff ceilings for both coal-fired and renewable-energy projects based on the applicable best practice price (BPP) at the time.[38] The most recent tariff ceilings are given in Decree No. 55 K/20/MEM/2019 on the Amount of Cost of Generation Provision, issued by the MEMR, and they are shown in Table 33.

Table 33: Electricity Tariff Ceilings Set by the Ministry of Energy and Mineral Resources, by Province or Region

No.	Region	Cost per kilowatt-hour (Rp)	Cost per kilowatt-hour ($)
I.	Sumatra	1,194	8.98
	A. Northern Sumatra		
	1. Aceh	1,673	11.74
	a. Weh Island	2 ,303	16.16
	b. Simeuleu Island	2,650	18.60
	2. North Sumatra	1,451	10.18
	Nias	3,041	21.34
	B. Central and Southern Sumatra		
	1. West Sumatra	1,058	7.43
	Mentawai Archipelago	3,041	21.34

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[38] Government of Indonesia, MEMR. 2019. Decree No. 55 K/20/MEM/2019 on the Amount of Cost of Generation Provision issued by Minister of Energy and Mineral Resources.

continued from previous page

No.	Region	Cost per kilowatt-hour (Rp)	Cost per kilowatt-hour ($)
	2. Riau and Riau Archipelago	1,655	11.61
	a. Bintan	1,786	12.53
	b. Tanjung Balai Karimun	2,110	14.81
	c. Natuna	2,239	15.71
	d. Anambas	2,267	15.91
	3. South Sumatra, Jambi, Bengkulu	1,061	7.45
	Enggano Island	3,041	21.34
	4. Lampung	1,039	7.29
	C. Bangka	2,681	18.82
	D. Belitung	1,799	12.63
	E. Other small archipelago subsystems	3,041	21.34
II.	Java–Bali	868	6.52
	A. DKI Jakarta	985	6.91
	Thousand Islands (Kepulauan Seribu)	1,164	8.17
	B. Banten	985	6.91
	Panjang Island	3,041	21.34
	C. West Java	984	6.91
	D. Central Java	984	6.91
	Karimun Jawa	3,041	21.34
	E. East Java	989	6.94
	1. Madura Island	3,041	21.34
	2. Bawean	3,041	21.34
	3. Gili Ketapang	3,041	21.34
	F. Bali	985	6.91
	Three Nusa System (*Sistem Tiga Nusa*) (Nusa Penida, Nusa Lembongan, Nusa Ceningan)	2,762	19.00
	G. Other small subsystems	3,041	21.34
III.	Kalimantan	1,373	10.31
	A. West Kalimantan	1,525	10.70
	B. South and Central Kalimantan	1,682	11.80
	C. East and North Kalimantan	1,507	10.58
	D. Other small subsystems	3,041	21.34
	E. West Java	984	6.91

DKI = Special Capital Region, Rp = Indonesian rupiah (national currency).

Source: MEMR. 2019. Decree No. 55 K/20/MEM/2019 on the Amount of Cost of Generation Provision.

4.2 Typical Risk Allocations for Public–Private Partnership Projects

The typical risk allocation framework for the energy sector projects is provided in Table 34 (footnote 3).

Table 34: Risk Allocations to the Public and Private Sectors for Energy Projects, by Risk Type

Risk Category	Private	Public	Shared	Comments
Tariff risk	✓			
Government payment risk		✓		
Environmental and social risk	✓			As projects require international finance, international environmental and social standards must be followed. Social risks remain critical in geothermal projects.
Land acquisition risk			✓	
Permits	✓			
Handover risk	✓			
Political risk		✓		The perception of political risk in projects involving independent power producers remains relatively high, due to the legal and regulatory risks and the breach of contract risk; thus, most players seek viable government support and/or political risk insurance from an export credit agency.
Regulatory risk		✓		There are major concerns in the private sector concerning the frequent changes in the regulations relevant to several energy sectors, notably the geothermal sector.
Interconnection risk	✓			
Brownfield risk: asset condition				This type of risk does not apply to energy projects.
Grid performance risk		✓		
Hydrology risk	✓			
Exploration and drilling risk	✓			This is a major expenditure for geothermal power, and therefore a significant risk.

✓ = Yes.

4.3 Financing Details of Public–Private Partnerships in the Energy Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	31	35	36
PPP projects that received export credit agency/international financing institution support	22	24	25
Typical debt:equity ratio	Ranges from 70:30 to 80:20		
Time for financial closure	UA		
Typical concession period	10–25 years		
Typical Financial Internal Rate of Return	10%–11%		

PPP = public–private partnership, UA = Unavailable

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the Energy Sector

The key challenges for the energy sector include the following:

- A significant challenge for the energy distribution system is the lack of transmission lines and supporting infrastructure. The transmission and distribution network remain a PLN monopoly.
- The lack of experience in private financing of (long-term) renewable energy projects remains a significant challenge for renewable project development.
- The challenges for geothermal projects specifically include the lack of community acceptance of geothermal projects and the lack of government guarantees for geothermal field development and resource confirmation.
- There have been delays in land acquisition delays due to local community objections.
- A recent trend is the PLN's practice of making power purchase agreements (PPAs) for shorter durations. PLN now offers take-or-pay commitments only for the tenure of the senior loan, whereas the commitments were previously offered for the entire term of the PPA. The shorter-duration commitments increase the revenue risk for the developer (footnote 3).

WATER AND WASTEWATER

Parameter	Value	Unit of Measurement
Access to improved water sources	87	% of population with access
Access to improved sanitation facilities	61	% of population with access
Investment in water and sanitation with private participation	140	$ million
Total number of projects with cumulative lending, grant, and technical assistance commitments in water and other urban infrastructure and services	94	Number
Total value of cumulative lending, grant, and technical assistance commitments in water and other urban infrastructure and services[c]	2.36	$ billion

Source: ADB. 2016. Country Partnership Strategy: Indonesia 2016–2019—Towards a Higher, More Inclusive and Sustainable Growth Path. Manila. https://www.adb.org/sites/default/files/institutional-document/202126/cps-ino-2016-2019.pdf.; The Economist Intelligence Unit. Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure. https://infrascope.eiu.com/; ADB Data Library. Cumulative Lending, Grant, and Technical Assistance Commitments. https://data.adb.org/dataset/cumulative-lending-grant-and-technical-assistance-commitments.

1. Contracting Agencies in the Water and Wastewater Sector

Since the implementation of decentralization in Indonesia, water and wastewater infrastructure development and service delivery has involved district and provincial governments as the government contracting agencies (GCAs). The roles and institutions involved could differ from one project to another, depending on the coverage of project. There could be at least four agencies responsible for water and wastewater project development: (i) the regional government as the GCA; (ii) the municipal or district public water company (PDAM) or provincial public water company (PDAB), (iii) the provincial house of representatives; and (iv) the private sector developer as a business partner.[39]

[39] World Bank. 2020. *Water Supply & Sanitation. In World Bank, Indonesia Public Expenditure Review: Spending for Better Results.* Washington, DC: The World Bank Group. http://pubdocs.worldbank.org/en/756411590233766450/ID-PER-2020-Ch12-Water-Supply.pdf.

Water

In Indonesia, water supply services are a devolved function, with the local governments having primary responsibility for the provision of basic services to the population; and the provincial and central governments having specified responsibilities. Local governments are responsible for water supply services that are solely operated and provided within their boundaries, whereas cross-boundary operations and services come under the purview of appropriate higher-level government. Indonesia has 542 autonomous subnational governments (provinces, cities, and districts), and of these, 514 cities and districts have a water supply system (footnote 39).

Most urban water supply services are provided by PDAMs. There are 448 water supply providers, of which (i) 391 are PDAMs; (ii) 26 are constituted under various legal forms, including technical departments, local public service agencies (BLUDs), or local water service bodies; and (iii) 30 are private entities, of which a significant number are special purpose companies (SPCs) that have been developed to provide services exclusively to specific housing developments or industrial areas (footnote 39).

The PDAMs were created to deliver water supply services, collect revenues for those services, and hold assets that have been assigned to them by the local governments. Accordingly, except in a few cases, PDAMs hold and operate assets along their entire water supply systems, including the facilities for intake, treatment, transmission, and distribution (footnote 39).

The PDAMs of Jakarta and North Sumatra operate at the provincial government level, while most of the remaining PDAMs operate at the municipal or district government level. The Special Capital Region of Jakarta (DKI Jakarta), has delegated the provision of its water supply services to Pam Jaya, a public water utility. Most of the PDAMs are relatively small, with fewer than water 10,000 connections. Only 4% of the PDAMs have more than 50,000 water connections. In the rural areas, the responsibility for water supply provision lies with the communities, which use springs, rainwater, and groundwater sources. These communities are responsible for planning, implementing, operating, and maintaining their water supply services. For the management of water resources, the responsibility lies with the river basin organizations, which manage more than 8,000 watersheds in 131 river basins. State-owned enterprises (SOEs), including enterprises owned by regional governments (ROEs), have the priority in water allocations. Licenses are also granted to private parties, but with strict requirements and controls, and subject to water availability (footnote 39).

Wastewater and Sanitation

Similar to the water supply services, the responsibility for basic sanitation (domestic wastewater) services has been primarily devolved to the local governments, following the principle of concurrent responsibility with the provincial and central governments. Local governments are responsible for the development of sewage and wastewater management services, though the central government may support local governments by providing financing for infrastructure development. The responsibility for pollution control lies with both the central and local governments, based on the jurisdiction. The responsibility for developing environmental infrastructure is shared by the local governments and business entities responsible for generating wastewater (footnote 39).

Most local governments implement sanitation programs, and operate and manage sanitation infrastructure through units (such as the BLUDs) within their environment, public works, or housing and settlements departments. A few local governments have established public wastewater utilities (e.g., PD PALs)—or have incorporated these responsibilities into their PDAMs (footnote 39).

2. Sector Laws and Regulations in the Water and Wastewater Sector

The laws and regulations concerning the water and wastewater sector are described as follows:

Originally, water resources and drinking water supplies were regulated under Law No. 11 of 1974 on Water Resources Development. However, after decentralization, Law No. 7 of 2004 on Water Resources was enacted, which provided for the decentralization of administrative and financial responsibilities in the sector, delineating the responsibilities and areas of authority of the central, provincial, and local governments. In February 2015, Law No. 7 of 2004 was revoked by the Constitutional Court, following challenges related to private sector control over water resources. The privatization of water supply services allowed under Law No. 7 of 2004 were considered to be contradictory to the following provisions of the Constitution of 1945:

- Land and water must be managed by the government.
- The government must fulfill the people's rights concerning water, because they relate to the accessibility of water.
- Water is one of the critical factors that substantially dominate people's lives.[40]

As a result, the associated regulations under Law No. 7 of 2004, including the regulation on drinking water and sanitation, were in an "uncertain" status. The Constitutional Court responded by reinstating Law No. 11 of 1974 on Water Resources Development.

Following this, Government Regulation No. 121 of 2015 on Water Resources Business and Government Regulation No. 122 of 2015 on Drinking Water Supply System were issued (under Law No. 11 of 1974) as bridging regulations while efforts were being made to enact a new water law. Both included provisions for private sector participation in water resource management and water supply system development, operations, and management.

Under Government Regulation No. 122 of 2015, the Ministry of Public Works and Housing (MPWH) had technical oversight and provided guidance and support to water supply providers. Private sector involvement in water supply was provided for in the regulation, within a defined scope and subject to certain principles. Water abstraction rights remained with national or local government enterprises, and service provision to the poor needed to be ensured. Private investments in any part of the water supply system were permitted, subject to the needs of the operation and management of water supply distribution, which remained under the purview of national or local government enterprises. (These enterprises may, however, cooperate with the private sector in the operations, maintenance, and management of water services through performance-based contracts.) The role of the Development Board for Water Supply, which had previously included advising on private sector cooperation, was revised to focus instead on improving the capacity and performance of PDAMs.

Government Regulation No. 121 of 2015 specified the agencies responsible for water resource planning, permit management, and development, and the scope of their authority. It set the framework for determining which water sources, above or below ground, could be used for drinking or nondrinking purposes. This regulation also included provisions for the involvement of the private sector in the financing and management of water

[40] World Bank. 2018*a*. *Indonesia Infrastructure Sector Assessment Program (InfraSAP)*. Washington, DC; Asia-Pacific Economic Cooperation (APEC), APEC Policy Support Unit. 2019. *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. Singapore. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia.

resources. While SOEs, including ROEs, had priority in water allocation, licenses could also be granted to private parties, though with strict requirements and controls, and subject to water availability. The regulation permitted the private sector to finance the development and management of water resource facilities (such as dams and reservoirs), and it provided for the collection of user fees by the private sector to cover the management, operation, development, and financing of water-resource management activities.

New Law on Water Resources—Law No. 17 of 2019

In 2019, the government enacted a new law on water resources. The key takeaways of the law are described below.

- The new legislation, Law No. 17 on 2019 on Water Resources, replaced Law No. 11 of 1974 on Water Resources Development. Law No. 17 of 2019 explicitly states that water resources must be controlled by the state and used first and foremost for the prosperity of the community. Therefore, individuals, community groups, and business entities cannot possess or control water resources; instead, control will remain with the central, regional, and local governments. It further emphasizes that society's right to water as guaranteed by the state is not to be interpreted as a title over water resources, but rather as a right to receive and use water. By doing so, it makes the state responsible for the conservation, sustainable utilization, and management of water resources, and for addressing any potential damage to those resources. This is reflected in the state's duties and obligations, which include the authority to
  - issue water utilization permits for commercial and noncommercial purposes,
  - determine and collect water tariffs, and
  - delineate the river regions and adopt management outlines and plans for water resources based on the river regions.
- Under Law No. 17 of 2019, the central and regional governments can delegate some of their duties and authority, including collecting water tariffs from license holders within a specific working area, to an SOE or ROE specifically established to carry out some of the government's responsibilities for water resources. At the regional level, the existing ROEs may only deal with drinking water supply systems.
- Water utilization for business activities or other private purposes are at the bottom of the list of priorities, so water may be used in these cases only if the public's basic daily needs and the needs of the agriculture sector have been met.
- Law No. 17 of 2019 also requires a license from the government for the use of water for business activities or for private noncommercial activities other than those guaranteed by the government. There are thus two types of licenses: those for commercial and those for private noncommercial activities. This licensing regime reaffirms the 2015 Constitutional Court ruling that private entities can only use water for commercial purposes if they have fulfilled certain requirements. The private entity must apply for a license and comply with the water resource-management outlines and plans, as well as with certain administrative technical requirements, in addition to obtaining approval from the relevant stakeholders in the area where the water resources are located. In cases where a river region has been assigned to an SOE, private entities must cooperate with and pay water tariffs to the SOE. This means that when a private entity wishes to utilize water for a commercial purpose, it must not only obtain a license from the government, but also enter into a contract with the SOE that controls the management of the relevant river region.[41]

[41] I.S. Assegaf et al. 2019. Indonesia: Wading through Indonesia's New Water Resources Law. Mondaq. 13 November. https://www.mondaq.com/Energy-and-Natural-Resources/863448/Wading-Through-Indonesia39s-New-Water-Resources-Law.

The various laws and regulations governing wastewater management include

- Law No. 23 of 2014 on Local Governments;
- Law No. 11 of 1974 on Water Resources Development;
- Law No. 32 of 2009 on Environmental Protection;
- Government Regulation No. 82 of 2001 on Water Quality Management and Water Pollution Control;
- Ministry of Environment and Forestry Regulation No. 68 of 2016 on Standards for Domestic Wastewater (including various industrial wastewater effluents); and
- various provincial governor regulations and mayor/regent regulations on wastewater effluent standards at the local level, which should be compliant with, or even stricter than, national effluent standards for both industry and domestic use.

Some of the laws and regulations governing PPPs in water and wastewater management sector include:

- MPWH Regulation No. 21 of 2018 on PPP Procedures in the Area of the MPWH,
- Presidential Regulation No. 38 of 2015 on Public–Private Partnership in Infrastructure Provision,
- Ministry of National Development Planning/National Development Planning Agency (BAPPENAS) Regulation No. 4 of 2015 on Procedures for Implementing Public–Private Partnerships,
- Head of the National Public Procurement Agency (LKPP) No. 19 of 2015 on Guidelines for the Procurement of Business Entities for PPPs Involved in Infrastructure Provision, and
- LKPP Regulation No. 29 of 2018 on Procedure for the Procurement of an Implementing Business Entity for a Solicited Public–Private Partnership for Infrastructure Provision.

Table 35: Aspects of Regulations on Private Sector Participation in Water and Wastewater Projects

Parameter	2017	2018	2019
Can the private sector be given water abstraction rights?	✓	✓	✓
Are there regulations in place on raw water extraction?	✓	✓	✓
Are there regulations in place on the release of treated effluents?	✓	✓	✓

✓ = Yes.

Source: World Bank. 2018. *Indonesia Infrastructure Sector Assessment Program (InfraSAP)*. Washington, DC.

Table 36: Water and Wastewater Regulatory Bodies in Indonesia

Agency	Function
Ministry of Public Works and Housing[a]	In charge of dealing with tenders, contracts, and procurement processes, which are delegated to the directorate general that deals with the relevant sector Defines national-level water and wastewater sector policies, technical standards for both water and wastewater treatment, and technical assistance
Directorate General of Water Resources	The main government agency dealing with the management and development of the water sector, responsible for formulating and implementing water sector policies and the technical standards for drinking water

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Agency	Function
Directorate General of Human Settlements	Involved in the water and wastewater sector through two directorates: the Directorate of Drinking Water Development and the Environmental and Settlement Sanitation Directorate (see below)
Agency for the Improvement of the Implementation of the Drinking Water Supply System (BPPSPAM)	The body under the Ministry of Public Works and Housing responsible for formulating and implementing policies related to drinking water, and for managing, monitoring, and facilitating the development of drinking water supply systems and infrastructure in Indonesia
The Environmental and Settlement Sanitation Directorate	Responsible for formulating and implementing policies and technical standards in the wastewater and drainage sector.
Research and Development Board	Responsible for conducting water resource-related research and development activities through its Water Resources Research and Development Centre
Ministry of Home Affairs	Manages water and wastewater utilities, drinking-water tariff guidelines, financial performance assessments, and monitoring
Ministry of Health	Sets drinking-water quality standards and monitors water and wastewater quality
Ministry of Finance	In charge of funding allocations, loan agreements, and the (multilateral) management of assets
Ministry of Environment and Forestry	Responsible for water pollution control and other related environmental policies
Ministry of Energy and Mineral Resources	Oversees exploration, development, and management of groundwater sources
Local governments	Manage local government-owned public water utilities
Indonesian Association of Water Utilities	Association of Indonesian drinking water and wastewater services. Provides the means for consumers to voice their grievances toward the municipal water and wastewater service providers.

BPPSPAM = Badan Peningkatan Penyelenggaraan Sistem Penyediaan Air Minum.

[a] Note that there is no overarching economic regulator of water providers; so, for instance, tariff decisions remain within the purview of the local governments.

Source: ADB. 2019. Public–Private Partnership Monitor (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

2.1 Foreign Investment Restrictions in the Water and Wastewater Sector

The details on foreign investment allowed in the water sector is given below.

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects			
• Bulk water supply and treatment	UA	UA	UA
• Water distribution	UA	UA	UA
• Wastewater treatment	100%	100%	100%
• Wastewater collection	100%	100%	100%

UA = Unavailable.

2.2 Standard Contracts in the Water and Wastewater Sector

Type of Contract	Availability
PPP/Concession agreement	×
Bulk water supply agreement	×
Performance-based O&M contract	×
Engineering procurement and construction contract	✓

O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

Most projects proposed under the national PPP program are based on the build–operate–transfer (BOT) model, but there is no standardization of contracts. Concession structures have been used for the Umbulan Water Supply Project, Bandar Lampung Water Supply System, Jakarta West Water Concession, Jakarta East Water Concession, and the Tangerang City Water Concession (footnote 3).

3. Water and Wastewater Sector Master Plan

3.1 National Water Master Plan

Sector strategy and investment priorities are detailed in the National Long-Term Development Plan (RPJPN), 2005–2025) and the National Medium-Term Development Plan (RPJMN), 2015–2019.

3.2 Water and Wastewater Public–Private Partnership Pipeline

In accordance with Ministry of National Development Planning/Head of National Planning Agency Regulation No. 4 of 2015, BAPPENAS issues its PPP Book every year to provide information on the PPP projects available for investment in Indonesia.[42] The projects are in various infrastructure sectors, and are organized into two categories based on their level of readiness: "ready to offer" and "under preparation." Based on the PPP Book 2019, the list of PPP projects in the pipeline for the water and wastewater sector are listed in Table 37.

Table 37: Pipeline of Public–Private Partnership Water and Wastewater Projects

Project Name	Status	Investment		Feasibility Study	Appointment of Concessionaire	Effective Date
		($ million)	(Rp trillion)			
Pekanbaru Water Supply PPP	Preparation	51.88	0.7	2019	2020	2020
Jatiluhur Regional Water Supply I (unsolicited project)	Tendered (prequalification)	133.10	1.8	2018	2020	2020

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[42] BAPPENAS, *Infrastructure Projects Plan in Indonesia 2019*. https://library.pppknowledgelab.org/documents/5826/download.

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Project Name	Status	Investment ($ million)	Investment (Rp trillion)	Feasibility Study	Appointment of Concessionaire	Effective Date
West Semarang Water Supply System PPP	Concept	73.67	1.0	UA	UA	UA
Jakarta Sewerage System PPP	Concept	4.33	0.1	UA	UA	UA
Bandar Lampung Water Supply System PPP	Concept	43.29	0.6	UA	UA	UA
Jatiluhur Drinking Water Supply System PPP II	Concept	103.30	1.4	UA	UA	UA

Rp1 = $0.00007201, PPP = public–private partnership, Rp = Indonesian rupiah (national currency), UA = Unavailable.

The PPP Book also provides information on prospective PPP infrastructure projects in Indonesia. These projects have a high probability of being included in the PPP pipeline in the future, either in the under-preparation or the ready-to-offer category, after passing the evaluation and satisfying the administration criteria. A list of the prospective water and wastewater PPP projects according to PPP Book 2019 is provided in Table 38.

Table 38: Prospective Public–Private Partnership Water and Wastewater Projects

Project Name	Government Contracting Agency
Merangin Reservoir	Ministry of Public Work and Housing
Kamijoro Water Supply	Government of DI Yogyakarta
Jatigede Water Supply	Government of Jawa Barat
Matenggeng Water Supply	Regional Government
Potential water supply systems from newly built dams: Sei Gong, Sindangheula, Marangkayu, and Passeloreng	Regional Government
Potential water supply systems from newly built dams: Karalloe, Tapin, and Way Sekampung	Regional Government
Karian Water Supply	Ministry of Public Works and Housing
Patimban Subang Regional Water Supply	Regional Government

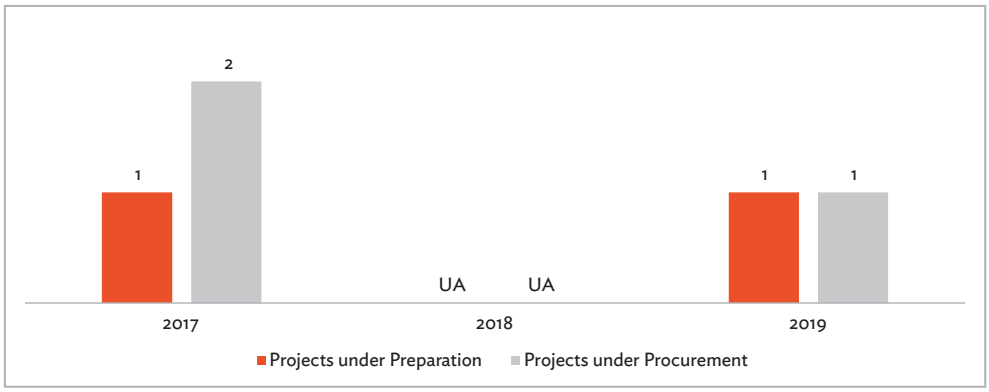
DI = Special Region.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia.

3.3 Projects under Preparation or Procurement

Figure 46 shows the number of PPP projects which are under preparation and procurement in the water and wastewater sector.

Figure 46: Public–Private Partnership Water and Wastewater Projects under Preparation and Procurement



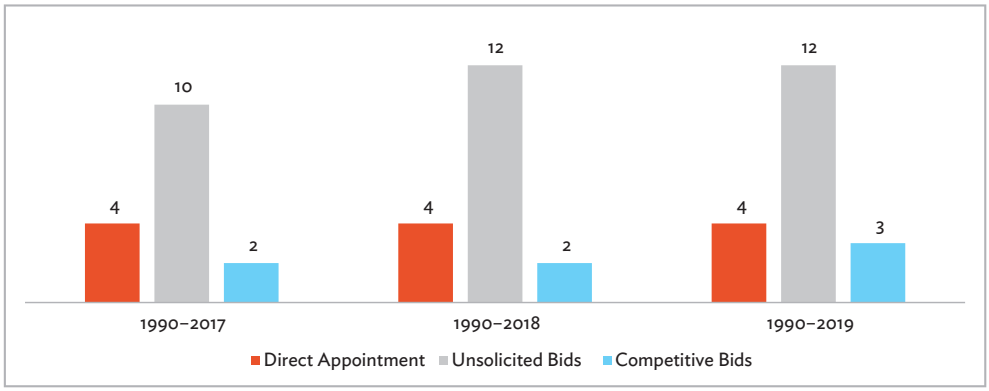
UA = Unavailable

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta, Indonesia (3 years: 2017–2019). https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

4. Features of Past Public–Private Partnership Projects

Figure 47 shows the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the water and wastewater sector in Indonesia.

Figure 47: Modes of Procurement for Public–Private Partnership Water and Wastewater Projects

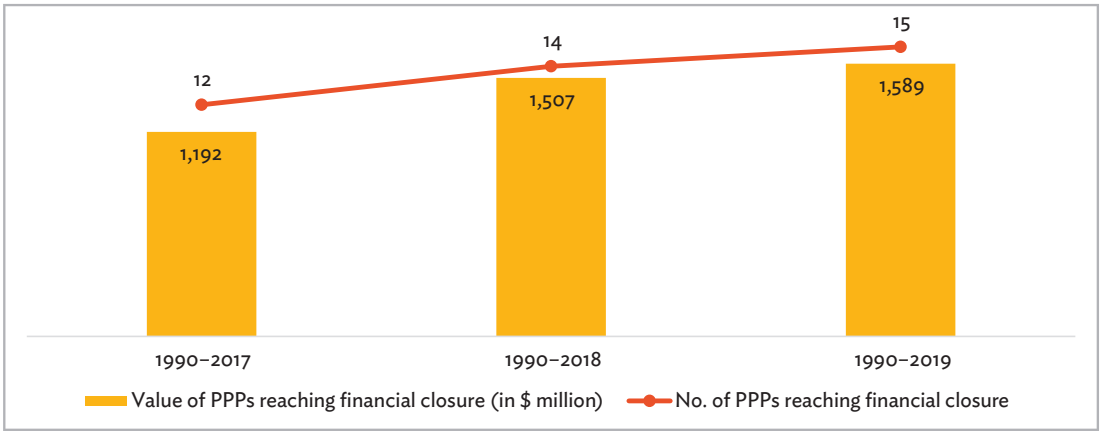


Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 48 presents the number of PPP projects which have reached financial closure and the total value of those projects in the water and wastewater sector in Indonesia.

Figure 48: Public–Private Partnership Water and Wastewater Projects Reaching Financial Closure



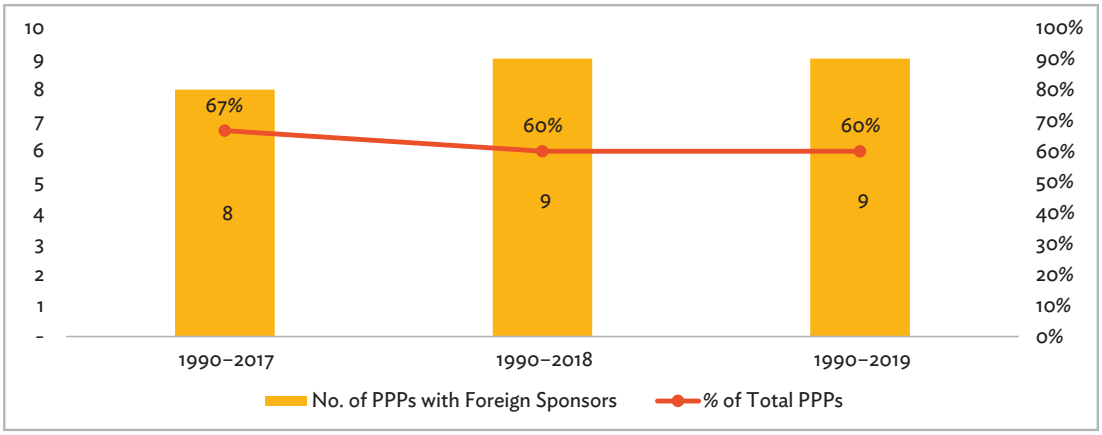
PPP = public–private partnership.

Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 49 shows the number of PPP projects which have received foreign sponsor participation in the water and wastewater sector in Indonesia.

Figure 49: Public–Private Partnership Water and Wastewater Projects with Foreign Sponsor Participation



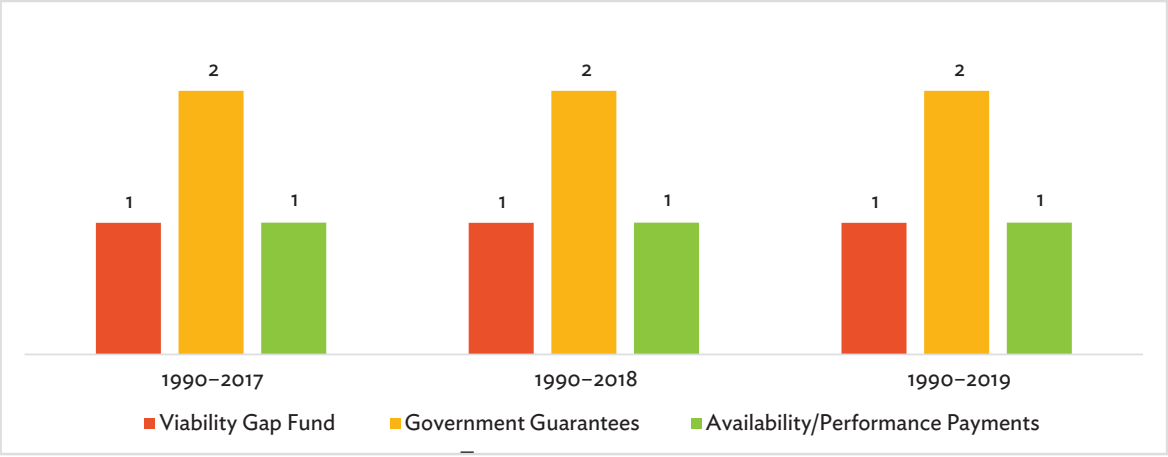
PPP = public–private partnership.

Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 50 presents the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the water and wastewater sector in Indonesia.

Figure 50: Government Support for Public–Private Partnership Water and Wastewater Projects

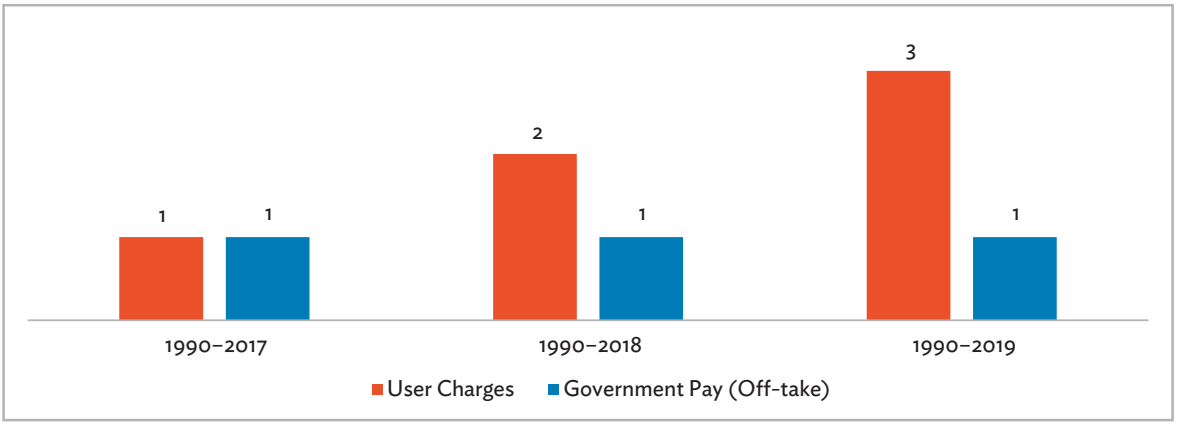


Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 51 presents the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the water and wastewater sector.

Figure 51: Payment Mechanisms for Public–Private Partnership Water and Wastewater Projects



Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Water and Wastewater Sector

In general, the local governments set the tariff for public water services through PDAM operations; therefore, there may be different tariffs in different areas. PDAMs are generally responsible for billing and revenue collection. In theory, the Ministry of Home Affairs regulations state that PDAMs have to charge tariffs high enough to cover their operational costs. However, in practice, more than 50% of the PDAMs have tariff structures that are too low to recover their costs. Many local governments prefer to charge low tariff rates and avoid increasing them, particularly when close to an election. But the laws are now changing, and PDAMs that enter the government's debt restructuring program are required to charge tariffs that recover the operational costs (footnote 3).

For water concessions, private companies request that the government contracting agency (GCA) raise the tariffs, but the decision is made by the local government. For example, in Jakarta, the companies Aetra or PALYJA would ask Pam Jaya to increase the tariff, and Pam Jaya would discuss the matter with the government before a decision is made. The tariffs usually included different rates for different customer categories. The tariff rates for Jakarta and Bandung are listed in Table 39.

Table 39: Water Tariffs in Jakarta and Bandung

Jakarta		Bandung	
Volume (m^3)	**Tariff** (Rp per m^3)	**Volume** (m^3)	**Tariff** (Rp per m^3)
0–10	3,550	0–10	1,000
10–20	4,700	10–20	1,600
Above 20	5,500	20–30	2,300
		Above 30	5,500
Fixed charge (Rp per month)	18,110	Fixed charge (Rp per month)	17,000

m^3 = square meter, Rp = Indonesian rupiah (national currency).

Note: An empty cell indicates that the column head does not apply.

Source: IBNet Tariffs DB. PDAM Lyonnaise Jaya (Palyja) (Indonesia). https://tariffs.ib-net.org/sites/IBNET/ViewTariff?tariffId=1648&countryId=0.

For the Umbulan BOT Bulk Water PPP Project, the target price of bulk water sold by the provincial public water company (PDAB) to the various PDAMs was set at Rp2,440 per m^3, while the target price of bulk water sold by the project's special purpose vehicle (SPV) to the PDAB was set at Rp2,370 per m^3. The estimated full-cost price of water sold to the PDAB was estimated at Rp6,600 per m^3, almost three times as much. Thus, a fully commercial project was not possible. The national government established a viability gap fund (VGF) for the project.

For the wastewater tariffs, there are two options:

- If the water and wastewater are billed together, the wastewater is charged as a surcharge in the range of 25%–30% of the water tariff. This arrangement already prevails for the Bandung PDAM.
- If the wastewater charge is separate, customers are billed based on the customer type (e.g., household or industry) and the total floor area of the connected building (footnote 3).

4.2 Typical Risk Allocations for Public–Private Partnership Projects in Water and Wastewater Sector

The typical arrangements for allocating risk associated with water concession contracts in Indonesia are listed in Table 40.

Table 40: Risk Allocations to the Public and Private Sectors for Water Concession Contracts, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand	✓			Both of Jakarta's water concessions and the Tangerang concession allocate demand risk and revenue-collection risk to the private sector. This has incentivized concession companies to invest where volume and high-value customers can be connected.
Revenue collection			✓	
Tariff			✓	While concession agreements generally provide for an index-linked tariff, this has been a major area of contention, as public resistance and lack of political will have resulted in prolonged delays to tariff rebasing negotiations.
Government payment	✓			Generally, the private sector takes on this risk; however, the IIGF usually provides a public sector guarantee against payment defaults by PDAMs.
Environment and social			✓	
Land acquisition		✓		Land acquisition is a slow and complex process in Indonesia, so the private sector has no appetite to accept the land acquisition risk.
Interface			✓	
Handover			✓	
Political			✓	
Foreign exchange (FOREX)			✓	

IIGF = Indonesia Infrastructure Guarantee Fund, PDAM = district or municipal public water company.

Source: ADB. 2019. *Public–Private Partnership Monitor* (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

The typical arrangements for allocating the risks associated with bulk water supply PPP contracts in Indonesia are listed in Table 41.

Table 41: Risk Allocations for Public–Private Partnership Bulk Water Supply Contracts, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand		✓		BOT projects have generally been conceived as bulk water supply projects, with the local PDAM being the off-taker and distributor. Consequently, revenue collection risk is generally the responsibility of the PDAM.
Revenue collection		✓		
Tariff		✓		BOT project agreements have generally been drafted with a provision for index-linked tariffs.
Government payment	✓			Generally, the private sector takes on this risk; however, the IIGF usually provides a public sector guarantee against payment defaults by PDAMs.

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Risk Type	Private	Public	Shared	Comments
Environment and Social			✓	
Land acquisition		✓		Land acquisition is a slow and complex process in Indonesia, so the private sector has no appetite to accept the land acquisition risk.
Interface			✓	
Handover			✓	
Political			✓	
Foreign exchange (FOREX)			✓	

BOT = build–operate–transfer, IIGF = Indonesia Infrastructure Guarantee Fund, PDAM = district or municipal public water company.

Source: ADB. 2019. Public–Private Partnership Monitor (second edition). Manila. https://www.adb.org/sites/default/files/publication/509426/ppp-monitor-second-edition.pdf.

According to PPP Book 2019, published by the Ministry of National Development Planning (BAPPENAS), there are three water supply projects that are currently at the construction stage:

- Umbulan Water Supply PPP Project (concession period—25 years)
- Bandar Lampung Water Supply System PPP Project (concession period—25 years)
- West Semarang Water Supply PPP Project (concession period—27 years)

In addition to this, the Jatiluhur Regional Water Supply I PPP Project (concession period—30 years) is at the prequalification stage.

All of these projects are bulk water supply projects in which the project special purpose vehicle (SPV) has entered into a BOT concession agreement with the GCA designated by the Ministry of Public Works and Housing (MPWH). Under the BOT concession agreement, the GCA makes bulk water payments to the project SPV. The IIGF guarantees all the PPP projects mentioned above, with the exception of the Jatiluhur Regional Water Supply I PPP Project.

4.3 Financing Details of Public–Private Partnerships in Water and Wastewater Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	13	13	13
PPP projects that received export credit agency/international financing institution support	13	13	13
Typical debt:equity ratio	Range from 55:45[a] to 75:25[b]		
Time for financial closure	6–12 months		
Typical concession period	25–30 years		
Typical Financial Internal Rate of Return	12%–16%		

PPP = public–private partnership.

[a] This applies to the Tangerang Water Supply PPP project.

[b] This applies to the Bandar Lampung Drinking Water PPP project.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in Water and Wastewater Sector

The key challenges for the sector include the following:

- Poor governance and capacity issues are likely to cause delays in PPP agreements.
- The lack of a centralized body to coordinate all issues related to water resource management means that public sector project proponents and investors have to manage multiple stakeholders.
- The PDAMs are incapable of planning investments, as they are not commercial enterprises, but typical bureaucratic units.
- Natural challenges include the lack of raw water resources. Moreover, rainfall patterns and population densities leave some areas with very limited water resources.
- There is a reluctance among some private sector partners to take responsibility for the construction of the "last mile" of customer connections, and for persuading potential customers to shift away from groundwater or other existing water sources to new water supplies.
- Many PDAMs in Indonesia are struggling to obtain their full cost recovery because of the low tariffs; and it is very difficult to increase tariffs, as it requires the approval of the provincial parliament. Only 30% of PDAMs in Indonesia are able to implement a full cost-recovery tariff (footnote 3).

INFORMATION AND COMMUNICATION TECHNOLOGY

Parameter	Value	Unit of Measurement
Telephone subscribers	3.10	Per 100 inhabitants
Cellular phone subscribers	119.34	Per 100 inhabitants
Cellular network coverage	100.00	% of population covered
Internet subscribers	3.32	Per 100 inhabitants
Internet bandwidth per internet user	6.23	kbps
Total number of projects with cumulative lending, grant, and technical assistance commitments in the ICT sector	UA	Number
Total amount of cumulative lending, grant, and technical assistance commitments in the ICT sector	UA	$ million

ICT = information and communication technology, kbps = kilobits per second, UA = Unavailable.

Sources: World Bank. Data. Fixed Telephone Subscriptions (per 100 people) – Myanmar, Cambodia, Uzbekistan, China, Bangladesh, Georgia, India, Indonesia, Kazakhstan, Pakistan, Philippines, Sri Lanka, Thailand, Vietnam. https://data.worldbank.org/indicator/IT.MLT.MAIN.P2?end=2018&locations=MM-KH-UZ-CN-BD-GE-IN-ID-KZ-PK-PH-LK-TH-VN&start=2018&view=bar; TheGlobalEconomy.com. Mobile Phone Subscribers, Per 100 People – Country Rankings. https://www.theglobaleconomy.com/rankings/Mobile_phone_subscribers_per_100_people/; TheGlobalEconomy.com. Mobile Network Coverage – Country Rankings. https://www.theglobaleconomy.com/rankings/Mobile_network_coverage/; TheGlobalEconomy.com. Internet Bandwidth – Country Rankings. https://www.theglobaleconomy.com/rankings/Internet_bandwidth/.

The information and communication technology (ICT) sector of Indonesia consists of three main segments: telecommunications, digital services, and cyber security. The telecommunications market in Indonesia is very competitive, with saturated voice and short message service (SMS) markets. The fixed-line broadband penetration is low compared with the mobile penetration. Digital services such as e-commerce, digital finance, and cloud services are disrupting traditional business models in Indonesia. Digital finance is the fastest growing digital service, followed by cloud services. The cyber security market comprises network security and advanced

network malware analysis. There is a large digital divide in Indonesia that is mostly attributable to the uneven distribution of ICT infrastructure. To overcome this digital divide, the Ministry of Communication and Informatics (MCI) is implementing various measures, including streamlining the allocation of ICT resources, allocating spectrum and telephone numbers, enhancing service coverage, and regulating service price rates.[43]

1. Contracting Agencies and Information and Communications Players

1.1 Contracting Agencies in the ICT Sector

The contracting agencies for the sector are described below.

- The Ministry of Communications and Informatics (MCI) is responsible for developing the ICT infrastructure in order to provide equal access to information in all regions in Indonesia. The MCI has typically been the GCA for PPP projects in the ICT sector.
- The MCI is responsible for policies regarding the digital government and telecommunications infrastructure. In addition, it is also responsible for overseeing critical infrastructure projects, including the Palapa Ring Project, which is a flagship project under the Five-Year National Broadband Plan, as well as projects such as the Multifunction Satellite Project.
- The MCI originally served as a regulator for the ICT sector, and as a facilitator for the implementation of various ICT programs. It established the Indonesian Telecommunication Regulatory Body (BRTI), to which it has delegated the authority to regulate, supervise, and control telecommunications networks and services. The BRTI also organizes telecommunications spectrum auctions, which are sanctioned by the MCI (footnote 43).

1.2 Information and Communication Technology Players

In the wired telecommunications segment, the state-owned telecommunications company, PT Telekomunikasi Indonesia Tbk (PT Telkom), has a monopoly of the operations of local and long-distance telephone services in Indonesia. The other major player in the fixed-line segment is Indosat Ooredoo.

In the wireless telecommunications segment, Telkomsel, the mobile subsidiary owned by Telkom Group, is a major player. Some of the other players include Indosat, Hutchison 3 Indonesia (H3I), XL-Axis, Smartfren, and Net1 Indonesia (Sampoerna).

In the satellite telecommunications segment, the sole player is the Indonesian-based satellite service provider BigNet. It has signed a $78 million long-term deal with Singapore-based Kacific Broadband Satellites, with which it is working to develop a new high-speed broadband service that will be available to Indonesians via satellite dish (footnote 43).

In the digital services segment, the major players include global cloud vendors and local telecommunications participants such as PT Sigma Cipta Caraka (Telkomsigma), Indonesian Cloud, XL Axiata, Indosat, NTT, Biznet, CBN, Omdata, and Elitery.

In the Cybersecurity services segment, the major players are the local service providers including Telkomtelstra, Binaryworks, and Xynexis.

[43] Frost & Sullivan. 2018. *Digital Market Overview: Indonesia.* Santa Clara, CA. https://ww2.frost.com/files/3115/2878/4354/Digital_Market_Overview_FCO_Indonesia_25May18.pdf.

2. Sector Laws and Regulations

2.1 Sector Laws and Regulations, by Types of Services

Telecommunications Services

The telecommunications service delivery in Indonesia fall under the Government Regulation No. 52 of 2000 on Telecommunications Operations, and the Regulation of the Minister of Communications and Informatics No. 10 of 2018 on Implementation of Telecommunications and Informatics Universal Service Obligation. According to these regulations, telecommunications operations are categorized into three categories:

- telecommunications network operations,
- telecommunications service operations, and
- special telecommunications operations.

Telecommunications network operations and telecommunications service operations can be conducted by private sector entities, but not special telecommunications operations.

As a part of telecommunications network operations, telecommunications network operators can build and provide telecommunications networks, based on the technical provisions of the government's Fundamental Technical Plan. Telecommunications network operations may consist of

- fixed network operations, including (i) local fixed network operations, (ii) long-distance direct-dialing fixed network operations, or (iii) international direct-dialing fixed-network operations; or
- mobile network operations, including (i) terrestrial mobile network operations, (ii) cellular mobile network operations, or (iii) satellite mobile network operations.

Telecommunications service providers can use telecommunications networks owned by telecommunications network operators to provide services after they have obtained a telecommunications service operations license from the MCI. Telecommunications service operations may consist of:

- basic telephone service operations,
- telephone value-added service operations, and
- multimedia service operations.

Telecommunications network operators and telecommunications service operators are required to pay a telecommunications operation rights fee, subject to the prevailing government regulation. Telecommunications operations charges include a telecommunications network operations tariff and a telecommunications service operations tariff.

The types of tariffs for telecommunications network operations include a

- network lease tariff, and
- interconnection fees.

The types of tariffs for telecommunications service operations, channeled through fixed networks, include

- tariffs for local-line basic telephone service, long-distance direct dialing service, and international direct dialing;
- tariff for telephone value-added services; and a
- tariff for multimedia services.

The structure of tariffs for telecommunications network operations includes an

- access fee,
- usage fee, and a
- universal service obligation contribution.

The structure of tariffs for telecommunication service operations includes an

- activation fee,
- monthly subscription fee,
- usage fee, and
- additional facilities fee.

Telecommunications operations can be conducted after obtaining licenses in two stages: the principle license and operation license. The principal license is granted for a maximum period of 3 years, and may be renewed.

Digital Services

Government Regulation No. 82 of 2012 on the Implementation of Electronic Systems and Transactions governs the digital services segment of the ICT sector in Indonesia.

Cybersecurity Services

There is no stand-alone cybersecurity law in Indonesia. The various Indonesian laws applicable to the development of cybersecurity are as follows:

- Law No. 11 of 2008 on Electronic Information and Transactions: This is the first cyber law in Indonesia, and it remains the main instrument for regulating online content and electronic transactions. Among the law's provisions are those on (i) electronic information, records, and signatures; (ii) electronic certification, systems, and transactions; (iii) domain names, intellectual property rights, and the protection of privacy rights; (iv) prohibited acts; and (v) investigations.
- Law No. 14 of 2008 on Public Information Disclosure: This law regulates information that is produced, stored, managed, sent, and/or received by a public agency. It states that every public agency is obligated to allow access to public information, except classified information. The law also identifies what information may be classified.
- Law No. 17 of 2011 on National Intelligence: It sets out the criteria for the classification of government secrets.
- Law No. 25 of 2009 on Public Service: This law identifies critical or strategic sectors that may require public services, such as education, health, energy, banking, transportation, natural resources, ICT, and tourism.

- Law No. 23 of 2006 on Citizen Administration: This law protects citizens' personal data, such as date of birth, citizen number, and family certificate number.
- Government Regulation No. 82 of 2012 on the Implementation of Electronic Systems and Transactions: This law regulates seven of the nine matters in this area that need to be regulated by the government. These are Provision of Electronic Systems, Electronic Agent Operator, Provision of Electronic Transactions, Electronic Signature, Provision of Electronic Certification, Trust Mark Certification Body, and Domain Name Administration (footnote 43).

In addition to these foundational laws, Law No. 11 of 2008 on Electronic Information and Transactions, which adheres to the United Nations Commission's standards for international trade law, also governs issues of cybersecurity.

2.2 Sector Regulators

As mentioned above, the MCI originally played the role of a regulator for the ICT sector, but later established the BRTI, to which it has delegated the authority to regulate, supervise, and control telecommunications networks and services (footnote 43).

There are a number of government authorities responsible for establishing digital law and policy. They include the MCI, Secretariat of the Cabinet, the House of Representatives, and other related departments. In addition, other ministries become involved if a law being proposed comes under their authority. For example, in 2015, the government launched the "2020 Go Digital Vision" campaign to boost the digital economy by helping small and medium-sized enterprises go digital. This scheme was implemented by the Ministry of Communication and Information Technology (MCIT) in collaboration with the Ministry of Cooperatives and Small and Medium Enterprises (footnote 43).

The regulators of the telecommunications segment of the ICT sector in Indonesia are the

- MCI,
- BRTI, and the
- National ICT Society (footnote 43).

The policy makers and regulators covering the digital services segment of the ICT sector in Indonesia include the

- Commission for the Supervision of Business Competition (KPPU),
- Ministry of Trade,
- MCI,
- Bank Indonesia (the central bank), and the
- Financial Services Authority (OJK) (footnote 43).

The government has set up an organization to provide cybersecurity for government institutions, select private companies, and the public. It is known as the National Cyber and Encryption Agency (BSSN). The BSSN is responsible for drafting the policies, legislation, and regulations regarding domestic-cybersecurity and network-security issues that fall within its purview (footnote 43).

2.3 Standard Contracts and Licenses in the ICT Sector

Parameter	2017	2018	2019
What standardized contracts are available and used in the market?			
• PPP/Concession agreement	×	×	×
• Performance-based O&M contract	×	×	×
• Engineering procurement and construction contract	✓	✓	✓
• License agreement	✓	✓	✓

ICT = information and communication technology, O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

2.4 Foreign Investment Restrictions in the ICT Sector

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects			
• Fixed line infrastructure	67%	67%	67%
• Fixed line services	67%	67%	67%
• Wireless and mobile infrastructure	67%	67%	67%
• Wireless and mobile services	67%	67%	67%

ICT = information and communication technology.

Source: Government of Indonesia, Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

3. ICT Sector Master Plan

The master plan for the ICT sector is described as follows:

- Indonesia's National Long-Term Development Plan 2005–2025 (RPJPN 2005–2025) provides the road map for the ICT sector in the country. Indonesia's National Medium-Term Development Plan 2015–2019 (RPJMN 2015–2019) was the third phase of implementation of RPJPN 2005–2025. As a part of its "infrastructure and security" pillar, the main targets achieved under RPJMN 2015–2019 included:
  - increased coverage of fixed broadband from 15% at the end of 2013 to 71% of urban households and 49% of rural households by the end of 2019; and
  - increased fixed-broadband speeds from 1 megabit per second (Mbps) at the end of 2013 to 20 Mbps in urban areas and 10 Mbps in rural areas by the end of 2019.[44]

[44] Indonesia Investments. *Government Development Plans of Indonesia.* https://www.indonesia-investments.com/projects/government-development-plans/item305; Frost & Sullivan, *Digital Market Overview: Indonesia.*

- To achieve these targets, the government launched the Indonesia Broadband Plan 2014–2019 to address the need for affordable broadband across the country's 18,000-plus islands. The most critical ICT infrastructure project proposed to help achieve the objectives of the Broadband Plan is the Palapa Ring project, which would involve the construction of a fiber-optic cable network comprising an undersea network of 13,000 kilometers (km) and an onshore network of 22,000 km. The project cost is estimated at $1.55 billion (Rp21.5 trillion), and would be implemented on a PPP basis. The private operator would be responsible for construction of the fiber-optic cable network, and would recover the costs based on the availability of infrastructure services by means of availability payments from the Telecommunications and Information Accessibility Body (BAKTI), under the MCI. These availability payments are guaranteed by Indonesia Infrastructure Guarantee Fund (IIGF).
- Three packages of the Palapa Ring project, including the Palapa Ring East Package, Palapa Ring West Package, and the Palapa Ring Central Package, have been successfully completed by MCI. The remaining packages of the Palapa Ring project are expected to be implemented under RPJMN 2020–2024.

Table 42: Details on the Palapa Ring Project

Project Name	PPP Type	Investment ($ million)	Investment (Rp trillion)	Status
Palapa Ring Broadband PPP Project	BOT	360	5	Under preparation

BOT = build–operate–transfer, PPP = public–private partnership, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia. National Medium-Term Development Plan 2020–2024.

The PPP Book provides information on prospective PPP infrastructure projects in Indonesia. These projects have a high probability of being included in the PPP pipeline in the future in either the under-preparation or ready-to-offer category after passing the evaluation and satisfying the administration criteria. A list of prospective ICT sector infrastructure PPP projects according to PPP Book 2019 is provided in Table 43.

Table 43: Prospective Public–Private Partnership Infrastructure Projects in the Information and Communications Sector

Project Name	Government Contracting Agency
Land Registration Information System PPP	Ministry of Agrarian Affairs and Spatial Planning/National Land Agency
Marine Observation and Modeling PPP	Meteorological, Climatological, and Geophysical Agency

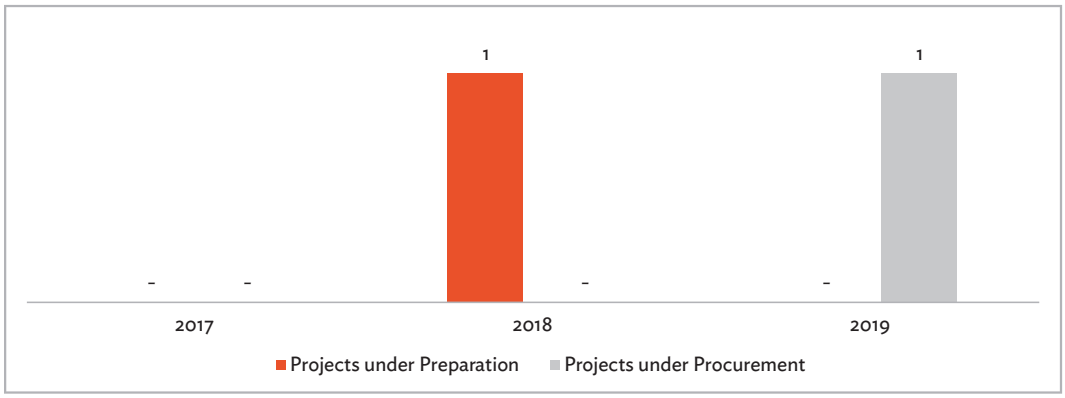
PPP = public–private partnership.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia.

3.1 Projects under Preparation and Procurement in the ICT Sector

Figure 52 shows the number of PPP projects which are under preparation and procurement in the ICT sector

Figure 52: Projects under Preparation and Procurement in the Information and Communication Technology Sector



Note: "-" includes: no projects, data not available, or not applicable.

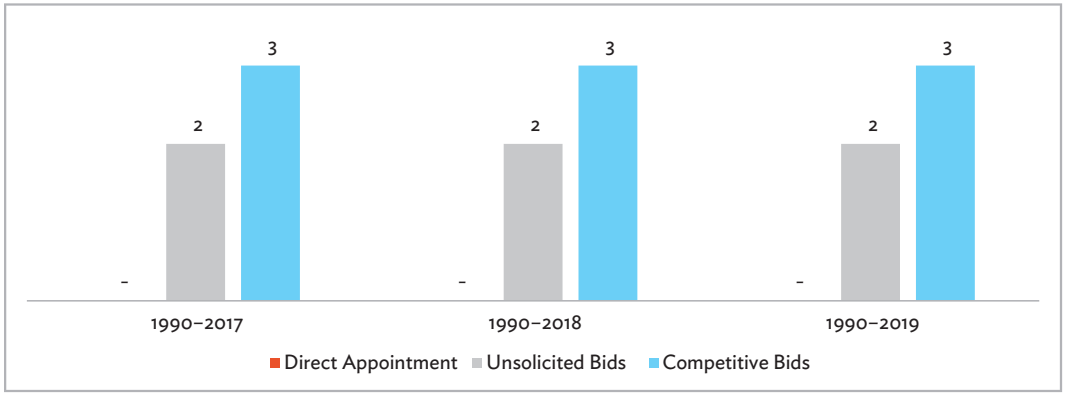
Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta, Indonesia (3 years: 2017–2019).

https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

4. Features of Past Public–Private Partnership Projects in the ICT Sector

Figure 53 presents the number of PPP projects which are under preparation and procurement in the ICT sector in Indonesia.

Figure 53: Modes of Procurement of Public–Private Partnership Projects in the Information and Communication Technology Sector

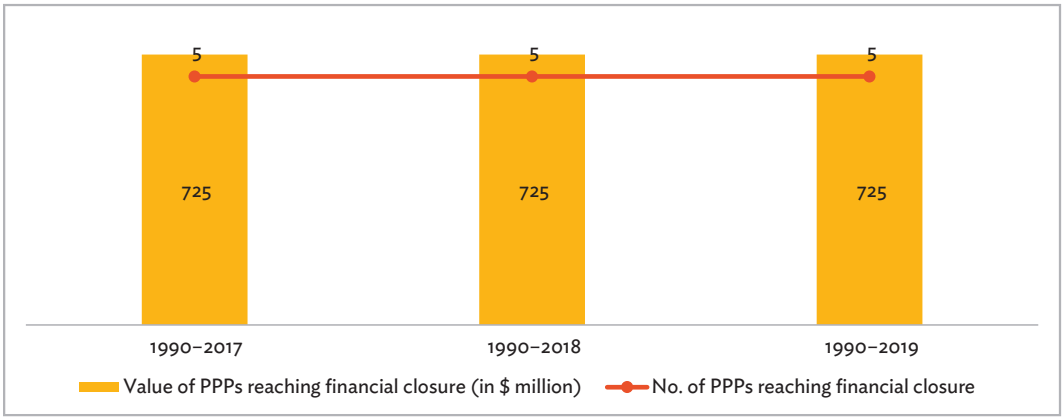


Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 54 presents the number of PPP projects which have reached financial closure and the total value of those projects in the ICT sector in Indonesia.

Figure 54: Information and Communication Technology Public–Private Partnership Projects Reaching Financing Closure



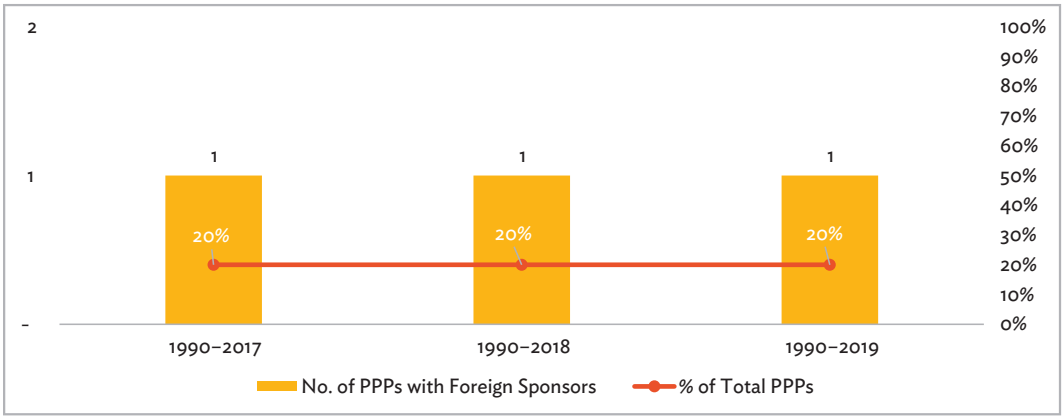
PPP = public–private partnership.

Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 55 shows the number of PPP projects which have received foreign sponsor participation in the ICT sector in Indonesia.

Figure 55: Public–Private Partnership Information and Communication Technology Projects with Foreign Sponsor Participation



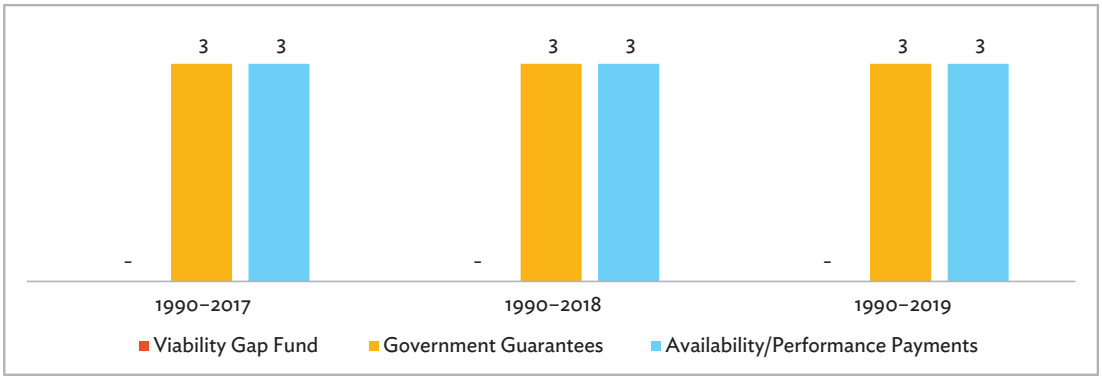
PPP = public–private partnership.

Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 56 presents the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the Indonesian ICT sector.

Figure 56: Government Support for Public–Private Partnership in Information and Communication Technology



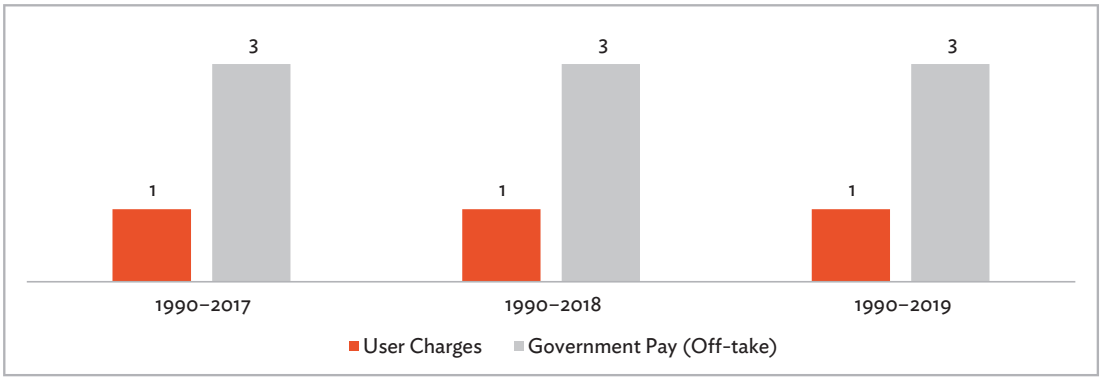
Notes: Only active projects are considered in the above graph. "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Three contracts were signed in 2016 for the Palapa Ring Broadband PPP project: those for Western, Central, and Eastern Indonesia. Palapa Ring is the first project in the telecommunications sector to use the availability payment scheme, introduced under the 2015 PPP regulations. It also received guarantees from the IIGF to secure the availability payments. The Palapa Ring Broadband Western Package has been operational since March 2018. The Central Package has been operational since December 2018, and the Eastern Package has been operational since August 2019. In addition, the Multifunction Satellite PPP project has been tendered, and is at the PPP agreement signing stage. This project also uses availability payments backed by an IIGF guarantee.

Figure 57 presents the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the ICT sector in Indonesia.

Figure 57: Payment Mechanisms for Public–Private Partnership in Information and Communication Technology



Note: Only active projects are considered in the above graph.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the ICT Sector

All the PPP projects in the ICT sector are based on availability payments backed by guarantees from the IIGF. Hence, no data on the tariffs chargeable for ICT services are available.

4.2 Typical Risk Allocations for Public–Private Partnership Projects in the ICT Sector

Based on the PPP structures for the Palapa Ring Broadband and Multifunction Satellite projects, the typical risk allocations for PPP projects in the ICT sector are listed in Table 44.

Table 44: Risk Allocations to the Public and Private Sectors for Projects in Information and Communication Technology, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand		✓		The demand, tariff, and revenue-collection risks are taken on by the public sector, as the users of ICT services delivered by the PPP projects make payments in the form of access charges and other relevant user fees to the MCI acting through BAKTI.
Revenue Collection		✓		
Tariff		✓		
Government Payment	✓			The private developer is responsible for designing building the project assets, and for delivering broadband and satellite services. The private developer gets paid in the form of availability payments from BAKTI linked to the availability of the project assets and service delivery performance. These availability payments from BAKTI are guaranteed by the IIGF.
Environment and Social			✓	
Land Acquisition		✓		Land acquisition is a slow and complex process in Indonesia; so, the private sector has no appetite for land acquisition risk.
Interface			✓	
Handover			✓	
Political			✓	
Foreign Exchange (FOREX)			✓	

BAKTI = Telecommunications and Information Accessibility Body, ICT = information and communication technology, IIGF = Indonesia Infrastructure Guarantee Fund, MCI = Ministry of Communication and Informatics, PPP = public–private partnership.

Source: Government of Indonesia, BAPPENAS. 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta. https://library.pppknowledgelab.org/documents/5826/download.

4.3 Financing Details of Public–Private Partnerships in the ICT Sector

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	1	1	1
PPP projects that received export credit agency/international financing institution support	UA	UA	UA
Typical debt:equity ratio	Ranges from 65:35 to 80:20		
Time for financial closure	6 months		

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Parameter	1990–2017	1990–2018	1990–2019
Typical concession period		15 years	
Typical Financial Internal Rate of Return		12%–15%	

PPP = public–private partnership, UA = Unavailable.

Sources: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019. Jakarta. https://library.pppknowledgelab.org/documents/5826/download; World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the ICT Sector

Poor governance and capacity issues are likely to cause delays in PPP agreement (footnote 3).

SOCIAL INFRASTRUCTURE

Parameter	Value	Unit of Measurement
Government expenditure on education	3.60	% of GDP
Education spending as a % of government spending	20.50	%
Primary school gross enrollment	106.00	%
Adult literacy rate	95.90	%
Total number of projects with cumulative lending, grant, and technical assistance commitments in the education sector	82.00	Number
Total value of cumulative lending, grant, and technical assistance commitments in the education sector	2,655.68	$ million
Total health expenditure	2.80	% of GDP
Health spending per capita	114.97	$
Maternal mortality ratio (modeled estimates)	126.00	Per 100,000 live births
Infant mortality rate	23.00	Below 1 year of age, per 1,000 live births
Life expectancy at birth	68.70	Years
Child malnutrition	18.80	% below 5 years of age
Total number of projects with cumulative lending, grant, and technical assistance commitments in the health sector	46	Number
Total amount of cumulative lending, grant, and technical assistance commitments in the health sector	1,108	$ million
Existing number of affordable housing units	UA	Number
Affordable housing gap	UA	

GDP = gross domestic product, UA = Unavailable.

Sources: The Economist Intelligence Unit. Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure. https://infrascope.eiu.com/; TheGlobalEconomy.com. Education Spending, Percent of Government Spending – Country Rankings. https://www.theglobaleconomy.com/rankings/Education_spending_percent_of_government_spending/; ADB. 2016. Country Partnership Strategy: Indonesia, 2016–2019—Towards a Higher, More Inclusive and Sustainable Growth Path. Manila. https://www.adb.org/sites/default/files/institutional-document/202126/cps-ino-2016-2019.pdf.; ADB Data Library. Cumulative Lending, Grant, and Technical Assistance Commitments. https://data.adb.org/dataset/cumulative-lending-grant-and-technical-assistance-commitments; TheGlobalEconomy.com. Health Spending per Capita – Country Rankings. https://www.theglobaleconomy.com/rankings/Health_spending_per_capita/.

Social infrastructure includes health-care facilities, education facilities, public housing, and government buildings.

1. Contracting Agencies in the Social Infrastructure Sector

Health-Care Services

There are three types of hospitals in Indonesia: public hospitals, private hospitals, and community or nonprofit-organization hospitals. Public hospitals are managed by the Ministry of Health, other government ministries, the provincial government, the municipal or district government, the military, or the police. Private hospitals are managed by state-owned enterprises (SOEs) or the private sector (individuals, companies, and other private sector entities). And community or nonprofit-organization hospitals are managed by the private nonprofit sector, for instance, by religious and social organizations.

Accordingly, in the case of implementation of a health care PPP at the national-government level, the Ministry of Health would act as the contracting agency. However, the Ministry of Health may delegate its responsibility for the implementation of a national-level health care PPP to a secretariat general. For the implementation of a health care PPP at the regional government level, the governor, a regent, or a mayor would act as the contracting agency. The governor, regent, or mayor may delegate their responsibility for the implementation of a regional-level health care PPP to a local secretary and or to a local public service agency (BLUD). Moreover, in the case of health-care facilities or hospitals devoted to specific needs, the contracting agency may be (i) the Ministry of Research Technology/National Research and Innovation Agency (for hospitals and medical schools); (ii) Ministry of Defense and Indonesian Armed Forces for Hospitals (for military hospitals); (iii) Indonesian National Police (for police hospitals); or (iv) the Ministry of Health for Hospitals (for hospitals for religious activities).

Education Services

Primary and secondary education in Indonesia comes under the purview of the Ministry of Education and Culture and the Ministry of Religious Affairs (for Islamic schools). Higher education in Indonesia comes under the purview of the Ministry of Research Technology/National Research and Innovation Agency.

Accordingly, for projects focused on primary and secondary education, the contracting agency could be a PPP, the Ministry of Education and Culture, or the Ministry of Religious Affairs (for Islamic schools). For PPPs involved in development, operations, and service delivery for universities, institutes, academies, and polytechnics, the contracting agency would be the Ministry of Research Technology/National Research and Innovation Agency.

Public Housing

In Indonesia, the responsibility for providing public housing is divided among the central government, provincial (or regional) governments, and city or district governments; but housing for low-income communities is under the central government. Provincial (or reginal) governments are responsible for facilitating the provision of housing for people affected by those governments' relocation programs, while the city and district governments are responsible for facilitating the provision of housing for people affected by their relocation programs.

However, at all the levels, the housing sector comes under the purview of the Ministry of Public Works and Housing (MPWH). For an affordable housing or public housing PPP project, the MPWH would act as a the contracting agency.

Government Buildings

Depending on the nature and the type of government building being developed, the contracting agency could be a governor, regent, or mayor; the MPWH; or an SOE or regional (government)-owned enterprise (ROE).

For correctional facility PPPs, the Ministry of Law and Human Right would be the contracting agency. For industrial zone PPPs, the Ministry of Industry would fulfill that role.

2. Social Infrastructure Sector Laws and Regulations

2.1 Health Care Sector Regulations

The delivery of healthcare services in Indonesia is governed by various laws and regulations, including government regulations, presidential regulations, and ministerial regulations. The relevant regulations governing the implementation and delivery of health-care infrastructure include:

- Law No. 44 of 2009 on Hospitals;
- Law No. 36 of 2009 on Health;
- Government Regulation No. 47 of 2016 on Health-Care Facilities;
- Presidential Regulation No. 72 of 2012 on the National Health System;
- Ministry of Health (MOH) Regulation No. 56 of 2014 on Hospital Classification and Licensing;
- MOH Regulation No. 85 of 2015 on the State Treasury and Hospitals;
- MOH Regulation No. 24 of 2016 on Technical Requirements of Hospital Infrastructure and Facilities;
- MOH Regulation No. 40 of 2018 on Guidelines for Implementing Cooperation between Government of Indonesia with Business Entities in the Provision of Healthcare Infrastructure;
- MOH Regulation No. 4 of 2019 on Technical Standards of Quality Service Compliance for Minimum Service of Healthcare;
- MOH Regulation No. 7 of 2019 on the Provision of Environmental Health in Hospitals;
- General Regulation No. 93 of 2015 on Teaching Hospitals;
- Minister of Defense Regulation 11 of 2014 on the Standardization of Health Equipment in Class III Hospitals at the Ministry of Defense and Indonesian Armed Forces;
- Head of Police of Indonesia Regulation No. 2 of 2010 on Guidelines of the Implementation of Bhayangkara Police Hospital; and
- Minister of Health Regulation No. 2407 of 2011 on the Hajj Health Service.

2.2 Education Sector Regulations

While there are various laws and regulations governing infrastructure development and service delivery in the education sector, the principal one is Law No. 20 of 2003 on the National Education System. This law lays down the provisions governing the delivery of primary, secondary, higher, informal, nonformal, religious, and other types of education. It also provides the educational standards to be met, as well as and the standards for education infrastructure, facilities, and equipment. According to the law and its implementation regulations, a special license is required to provide formal education services (primary, secondary, and tertiary education).

2.3 Public Housing Regulations

The various laws, government regulations, and ministry regulations governing the delivery of public housing services include:

- Law No. 20 of 2011 on Vertical Housing;
- Law No. 4 of 2016 on the Public Housing Fund;
- Government Regulation No. 64 of 2016 on the Development of Low-Income Community Housing;
- MPWH Regulation No. 21 of 2018 on the Implementation of Procedures for Cooperation between Government and Business Entities in the Provision of Infrastructure within the Ministry of Public Works and Housing;
- MPWH Regulation No. 21 of 2016 on the Facilitation and/or Aid for Housing Procurement for Low-Income Communities;
- MOHA Regulation No. 55 of 2017 on the Implementation of Licensing and Non-Licensing of the Construction of Low-Income Community Housing; and
- MPWH Regulation No. 1 of 2018 on Vertical Housing Construction and Management Aid.

2.4 Regulations on Other Social Infrastructure—Government Buildings, Prisons, Correctional Centers, and Other Facilities

The construction of other social infrastructure—such as government buildings, prisons, correctional centers, markets, industrial estates—are governed by the following laws and regulations:

- Law No. 2 of 2017 on Construction Projects Financed by the State Budget;
- Ministry of Trade Regulation No. 70 of 2013 (as amended by Ministry of Trade Regulation No. 56 of 2014) on Guidelines for Structuring and Fostering Traditional Markets, Shopping Centers, and Modern Shops;
- Ministry of Trade Regulation No. 37 of 2017 (as amended by Ministry of Trade Regulation No. 37 of 2017) on Trade Facility Construction and Management;
- Presidential Residential No. 112 of 2007 on Structuring and Guidance of the Traditional Market, Shopping Center, and Modern Shop;
- Law No. 7/2014 on Trade;
- Law No. 3/2014 on Industry;
- Governmental Regulation No.142 of 2015 on Industrial Estate; and
- Ministry of Industry Regulation No. 40 of 2016 on Technical Guidelines for Industrial Estate Development.

2.5 Standard Contracts in the Social Sector

Parameter	2017	2018	2019
What standardized contracts are available and used in the market?			
PPP/Concession agreement	×	×	×
Performance-based O&M contract	×	×	×

Parameter	2017	2018	2019
Engineering procurement and construction contract	✓	✓	✓

O&M = operation and maintenance, PPP = public–private partnership.

✓ = Yes, × = No.

2.6 Foreign Investment Restrictions

Parameter	2017	2018	2019
Maximum foreign ownership of equity allowed in greenfield projects			
• Construction of health-care facilities	67%	67%	67%[a]
• Services, including hospital management, specialist hospitals and clinics, mental hospitals, dental clinics, and laboratories and medical check-up services	67%	67%	67%
• Private maternity hospital, clinic general medical services/public hospital/ public medical clinic, residential health services, and basic healthcare services facility	0	0	0
• Construction of education facilities	67%	67%	67%
• Nonformal education services (vocational training, computer education, and language education)	67%	67%	67%
• Formal education services	With license	With license	With license
• Government buildings	67%	67%	67%
• Prisons and correctional institutions	100%	100%	100%
• Public housing	100%	100%	100%

[a] For investors from other member countries of the Association of Southeast Asian Nations (ASEAN), the maximum capital ownership allowed in the construction of health-care facilities is 70%.

Source: Government of Indonesia, Presidential Regulation No. 44 of 2016 on Lists of Business Fields That Are Closed to and Business Fields That Are Open with Conditions to Investment.

3. Social Infrastructure Sector Master Plan

There are no specific details on the sector master plans for health care, education, public housing, and other types of social infrastructure available in English. The various social infrastructure PPP projects listed in PPP Yearbook 2019 are listed in Table 45.

Table 45: Pipeline of Public–Private Partnership Projects in the Social Infrastructure Sectors

Project Name	Status	Sector	Responsible Agency (Implementing Unit)	Investment	
				($ million)	(Rp trillion)
Indonesia National Cancer Center, Dharmais Hospital PPP	Under preparation	Health care	Minister of Health (Ministry of Health)	170.00	2.4

Project Name	Status	Sector	Responsible Agency (Implementing Unit)	Investment	
				($ million)	(Rp trillion)
Pirngadi Hospital PPP	Under preparation	Health care	Mayor of Medan (Regional Development Planning Agency of Medan City)	48.93	0.7
Zainoel Abidin General Hospital PPP	Under preparation	Health care	Governor of Nangroe Aceh Darussalam (Provincial Government of NAD)	139.74	1.9
Sidoarjo General Hospital PPP	Prequalification	Health care	Regent of Sidoarjo	23.88	0.3
Gorontalo Regional Hospital PPP	Prequalification	Health care	Governor of Gorontalo	54.80	0.8
Relocation of Salemba Correctional Facility PPP	Under preparation	Correctional facilities	Minister of Law and Human Right (Directorate General of Correctional Facility)	94.52	1.3
Nusakambangan Industrial Correctional Facility PPP	Under preparation	Correctional facilities	Minister of Law and Human Right (Directorate General of Correctional Facility)	35.81	0.5
University of Sam Ratulangi Teaching Hospital PPP	Under preparation	Education	Minister of Research and Technology/Head of National Research and Innovation Agency (University of Sam Ratulangi)	28.09	0.4
Institut Teknologi Bandung's Cirebon Campus Development PPP	Under preparation	Education	Minister of Research and Technology/Head of National Research and Innovation Agency (Institut Teknologi Bandung)	29.36	0.4
Ciputat Market PPP	Under preparation	Urban facility	Mayor of South Tangerang (Industry and Trade Department)	16.87	0.2
Teluk Bintuni Industrial Zone PPP	Under preparation	Industrial zones	Minister of Industry (Directorate General of Chemical, Textile, and Various Industries)	441.41	6.1

NAD = Nangroe Aceh Darussalam, PPP = public–private partnership, Rp = Indonesian rupiah (national currency).

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta, Indonesia.

The PPP Book also provides information on prospective PPP infrastructure projects in Indonesia. These projects have a high probability of being included in the PPP pipeline in the future, in either the under-preparation or ready-to-offer category, after passing the evaluation and satisfying the administration criteria. A list of prospective social infrastructure PPP projects according to the PPP Book 2019 is provided in Table 46.

Table 46: Prospective Public–Private Partnership Social Infrastructure Projects

Project Name	Government Contracting Agency
Central Kalimantan Provincial Hospital	Provincial Government of Central Kalimantan
Jogja Agro Techno Park PPP	Provincial Government of DI Yogyakarta
Tanjung Adikarto Fishery Zone PPP	Provincial Government of DI Yogyakarta
Ngawi Industrial Zone PPP	Regency Government of Ngawi
Ocean Research Center	Indonesian Institute of Sciences
Traditional Markets (Jombang and Serpong Markets)	Municipal Government of South Tangerang
Badung Utility Ducting	Regency Government of Badung

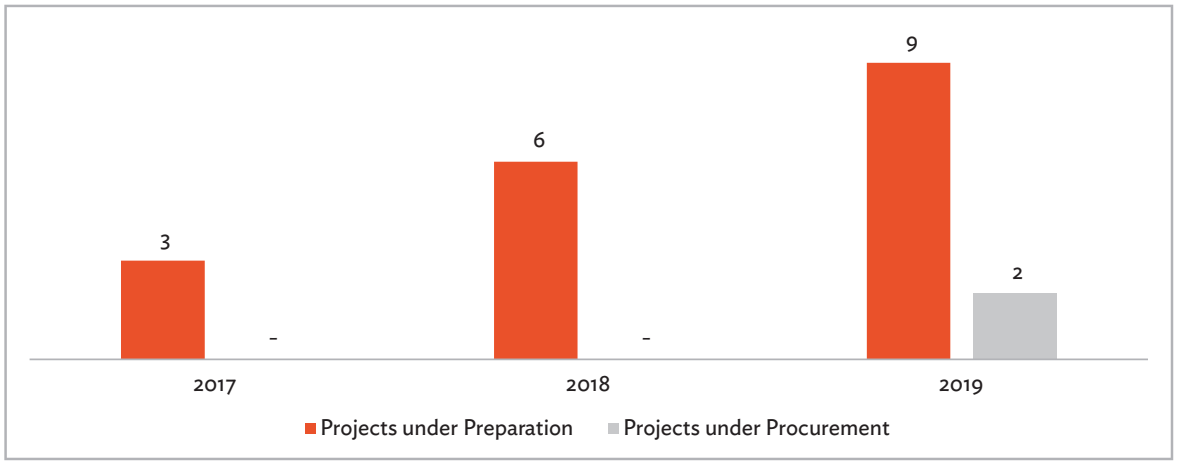
DI = Special Region, PPP = public–private partnership.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). 2019. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019*. Jakarta. https://library.pppknowledgelab.org/documents/5826/download.

3.1 Projects under Preparation and Procurement in the Social Infrastructure Sector

Figure 58 shows the number of PPP projects which are under preparation and procurement in the social infrastructure sector in Indonesia.

Figure 58: Social Infrastructure Public–Private Partnership Projects under Preparation or Procurement



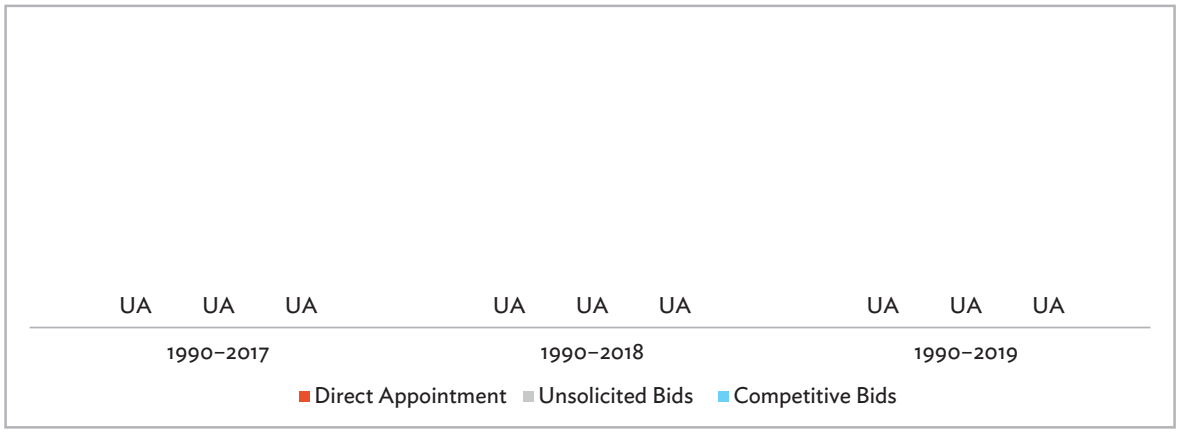
Note: "-" includes: no projects, data not available, or not applicable.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia.* Jakarta, Indonesia (3 years: 2017–2019). https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

4. Features of Past Public–Private Partnership Project in the Social Infrastructure Sector

Figure 59 presents the number of PPP projects procured through various modes including direct appointment, unsolicited bids, and competitive bids in the social infrastructure sector in Indonesia.

Figure 59: Modes of Procurement of Public–Private Partnership Social Infrastructure Projects

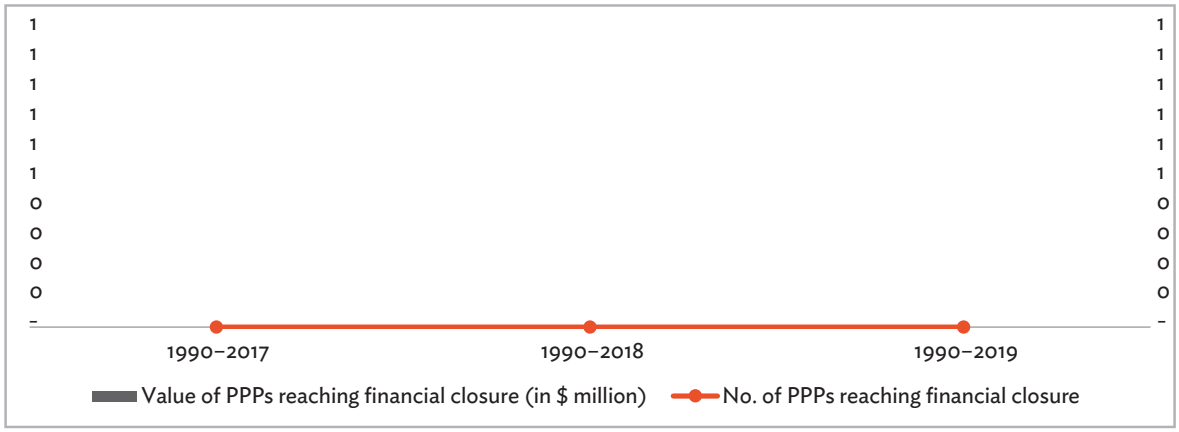


UA = Unavailable.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 60 provides the number of PPP projects which have reached financial closure and the total value of those projects in the social infrastructure sector in Indonesia.

Figure 60: Public–Private Partnership Social Infrastructure Projects Reaching Financial Closure



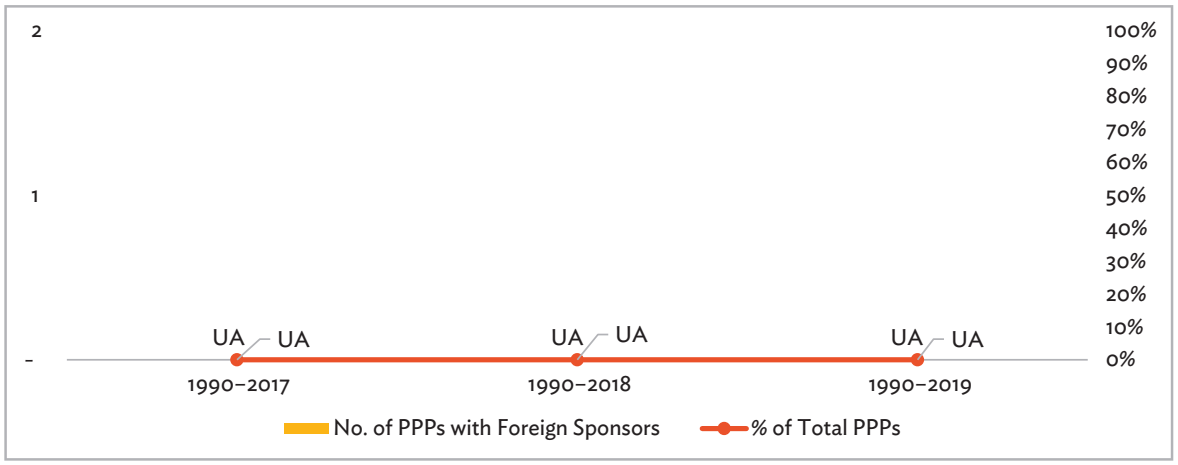
PPP = public–private partnership.

Note: "-" includes: no projects, data not available, or not applicable according to the database.

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 61 shows the number of PPP projects which have received foreign sponsor participation in the social infrastructure sector.

Figure 61: Public–Private Partnership Social Infrastructure Projects with Foreign Sponsor Participation

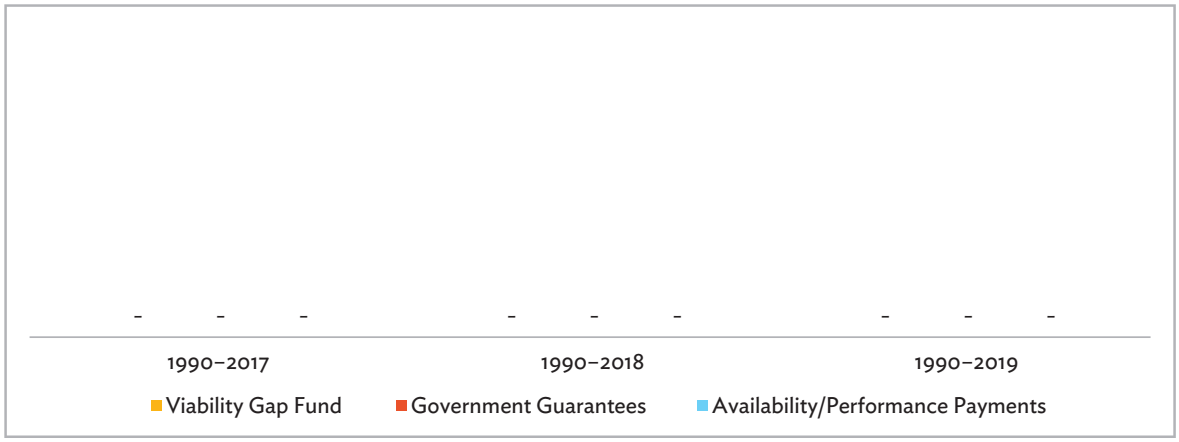


PPP = public–private partnership, UA = Unavailable

Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 62 represents the number of PPP projects which have received government support including viability gap fund (VGF) mechanism, government guarantees, and availability/performance payment in the social infrastructure sector in Indonesia.

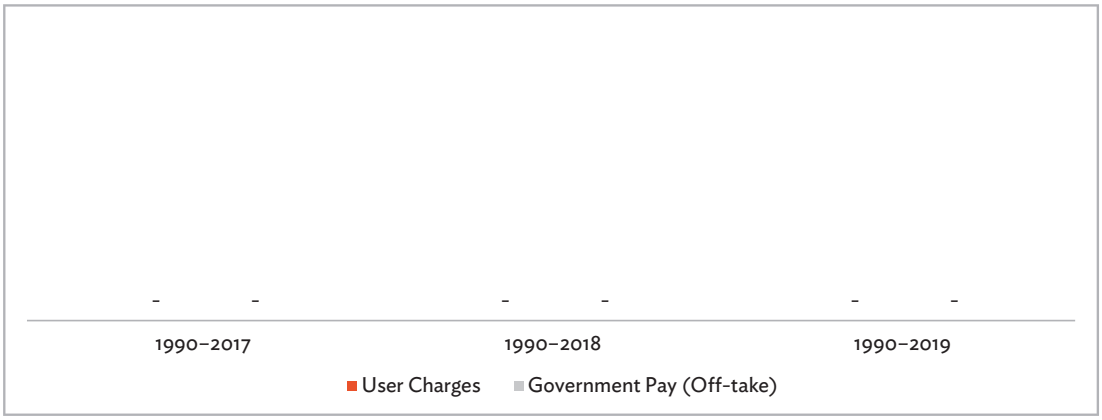
Figure 62: Government Support to Public–Private Partnership Social Infrastructure Projects



Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

Figure 63 shows the number of PPP projects which have received payment in the form of user charges and government pay (offtake) in the social infrastructure sector.

Figure 63: Payment Mechanisms for Public–Private Partnership Social Infrastructure Projects



Source: World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

4.1 Tariffs in the Social Infrastructure Sector

No information on the tariffs for social infrastructure projects is available.

4.2 Typical Risk Allocations for Public–Private Partnerships in the Social Infrastructure Sector

Most social infrastructure projects are based on availability payments that are backed by guarantees from the Indonesia Infrastructure Guarantee Fund (IIGF). Accordingly, the typical risk allocations for social infrastructure projects are shown in Table 47.

Table 47: Risk Allocations to the Public and Private Sectors for Social Infrastructure Projects, by Risk Type

Risk Type	Private	Public	Shared	Comments
Demand		✓		The demand, revenue-collection, and tariff risks are generally borne by the GCA.
Revenue collection		✓		
Tariff		✓		
Government payment	✓			Generally, the private sector takes on this risk, but the public sector IIGF usually provides a guarantee against default of payments by the contracting agency.
Environment and social			✓	
Land acquisition		✓		Land acquisition is a slow and complex process in Indonesia, so the private sector has no appetite for this type of risk.

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Risk Type	Private	Public	Shared	Comments
Interface			✓	
Handover			✓	
Political			✓	
Foreign exchange (FOREX)			✓	

GCA = government contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund.

✓ = Yes.

Source: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia. Jakarta (3 years: 2015, 2017, and 2019)*. https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202015.pdf, https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://library.pppknowledgelab.org/documents/5826/download.

4.3 Financing Details

Parameter	1990–2017	1990–2018	1990–2019
PPP projects with foreign lending participation	UA	UA	UA
PPP projects that received export credit agency/international financing institution support	UA	UA	UA
Typical debt:equity ratio	70:30		
Time for financial closure	6 months		
Typical concession period	Health care: 12–17 years Correctional facilities: 15–25 years Education: 20 years Other social infrastructure: 20–25 years		
Typical Financial Internal Rate of Return	10%–15%		

PPP = public–private partnership, UA = Unavailable.

Sources: Government of Indonesia, Ministry of National Development Planning (BAPPENAS). *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*. Jakarta (3 years: 2015, 2017, and 2019). https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202015.pdf, https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://library.pppknowledgelab.org/documents/5826/download; World Bank. Infrastructure Finance, PPPs and Guarantees. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

5. Challenges in the Social Infrastructure Sector

- Hospitals are an untested sector for private sector involvement in Indonesia. Two hospital PPP projects are being tendered. Their success would create a precedent for the use of hospital PPPs as a way to meet the challenges involved in hospital construction, expansion, and management, thus paving the way to future hospital PPPs.

IV. Local Government Landscape for Public–Private Partnerships

Table 48: Revenue Sources and Expenditures of Subnational Governments

Parameter	Value
Number of Subnational Governments[a]	
Municipal level	508
Intermediate level	UA
Regional or state level	34
Total number of SNGs	542
SNG Expenditure Profile[a]	
Total SNG expenditure (% of GDP)	6.80
• SNG current expenditure (% of GDP)	5.50
• SNG staff expenditure (% of GDP)	3.00
• SNG investment (% of GDP)	1.30
Total SNG expenditure (% of total government expenditure)	36.40
• SNG current expenditure (% of total current government expenditure)	UA
• SNG staff expenditure (% of total government staff expenditure)	56.40
• SNG investment (% of total government investments)	40.80
Current expenditure of SNGs (% of total SNG expenditure)	80.90
Staff expenditure of SNGs (% of total SNG expenditure)	44.20
Investments of SNG (% of total SNG expenditure)	19.10
SNG Expenditure by Function[a]	
General public services (% of total government expenditure)	32.20
Defence (% of total government expenditure)	
Security and public order (% of total government expenditure)	1.00
Economic affairs (% of total government expenditure)	9.30
Environmental protection (% of total government expenditure)	2.30
Housing and community amenities (% of total government expenditure)	16.40
Health (% of total government expenditure)	9.60
Recreation, culture, and religion (% of total government expenditure)	0.70
Education (% of total government expenditure)	27.10
Social protection (% of total government expenditure)	1.50

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Parameter	Value
SNG Revenue Profile[a]	
Total SNG revenue (% of GDP)	7.20
• SNG tax revenue (% of GDP)	1.20
• SNG grants and subsidies (% of GDP)	5.40
• SNG other revenues (% of GDP)	0.60
Total SNG revenue (% of total government revenue)	42.6
• SNG tax revenue (% of total government tax revenue)	9.70
• SNG grants and subsidies (% of total government grants and subsidies)	UA
• SNG other revenues (% of total other revenues)	UA
SNG tax revenue (% of total SNG revenue)	16.80
SNG grants and subsidies (% of total SNG revenue)	75.00
SNG other revenues (% of total SNG revenue)	8.10
SNG Debt Profile[a]	
Outstanding SNG debt (% of GDP)	0.20
Outstanding SNG debt (% of total outstanding government debt)	0.80
Parameters for Transfers from the National Government to SNGs[b]	
Score on transfers to subnational governments	B
• Score on system for allocating transfers	C
• Score on timeliness of information on transfers	A
• Score on the extent of collection and reporting of consolidated fiscal data on the government overall	
Value of transfers from the national government to SNGs (% of the GDP)	5.70
Value of actual budgetary allocations to SNGs from the national government (% of total expenditure)	38.10
Value of deviation of the actual transfers to SNGs from the budgeted transfers (% of budgeted transfers)	3.70

GDP = gross domestic product, SNG = subnational government, UA = Unavailable.

[a] Organisation for Economic Co-operation and Development (OECD), United Cities and Local Governments (UCLG), Agence Française de Développement (AFD). 2016. *Subnational Governments Around the World: Structure and Finance; Part III – Country Profiles*. Paris and Barcelona. http://www.uclg-localfinance.org/observatory.

[b] World Bank. 2018. *Indonesia Public Expenditure and Financial Accountability (PEFA): Assessment Report 2017*. Jakarta and Washington, DC. https://www.pefa.org/sites/pefa/files/assessments/reports/ID-May18-PFMPR-Public-with-PEFA-Check.pdf.

Local Governance System in Indonesia

Indonesia is a unitary republic and is divided into five layers of government: central (or national), provinces (or regions), *kabupaten* (districts) and *kota* (municipalities), *kecamatan* (subdistricts), and *kelurahan* or *desa* (villages). The term *pemerintah daerah* (local government) refers to both Indonesia's provincial governments and to regency and municipal governments. Indonesia consists of 34 *provinsi* (provinces) and 508 local governments (regencies and cities).[45]

[45] A. Nasution. 2016. Government Decentralization Program in Indonesia. *ADBI Working Paper Series*. No. 601. Tokyo: Asian Development Bank Institute. https://www.adb.org/sites/default/files/publication/201116/adbi-wp601.pdf.

Based on the country's decentralization policy, the national government retains five functions that affect the nation as a whole, and devolved 11 obligatory functions to the subnational governments. The power of national government is limited to six broad areas—finance, foreign affairs, defense, security, religion, and state administration and justice. These functions include international policies and the implementation of treaties with foreign countries, citizenship and immigration, judicature, external trade, national monetary and fiscal policy, national planning, national macroeconomic development control, the currency, banking and insurance, national fund balance, state administration and state economic institutional systems, human resources development, natural resources utilization, strategic high technology, conservation, and national standardization (footnote 45).

Laws No. 22 of 1999 and No. 32 of 2004 gave the provinces and regions the authority to execute a wide range of responsibilities in areas such as health, education, public works, environment, communications, transportation, agriculture, manufacturing industry and trade, capital investment, land, cooperatives, the labor force, and infrastructure services. Law No. 23 of 2014 and revised Law No. 32 of 2004 itemize the responsibilities of the subnational governments (footnote 45).

Infrastructure Development Plan of Local Governments

With regard to infrastructure development, subnational governments are involved in the planning, preparation, transaction, and implementation of PPP projects. They can plan and undertake projects and issue regulations for specific developments, as long as those regulations do not contravene or conflict with the national government's regulations.

Subnational governments undergo a process defined under PPP regulations for undertaking projects under a PPP. However, the overall process of approvals for subnational-government projects is not very clear. According to Presidential Regulation No. 38 of 2015 and Ministry of Home Affairs (MOHA) Regulation No. 96 of 2016, the MOHA is mandated to administer the process of approving proposals for availability payments for projects. Subnational governments may, after the planning stage is approved, undertake further steps through a project development facility (PDF) or appoint transaction advisors.

Cooperation between regional governments and business entities was guided by Government Regulation 50 of 2007 on the Implementation Procedure of Regional Cooperation. That regulation was later amended and replaced by Government Regulation No. 28 of 2018 on Regional Cooperation. Subject to approvals and other considerations, Government Regulation No. 28 of 2018 permits provincial and regional governments to cooperate with other provincial and regional governments, third parties, and/or foreign regional governments and agencies. The regulation also provides for cooperation between regional or provincial governments and third-party business entities, thereby constituting PPPs. Under the new regulation, the Government of Malang Regency and the Government of Malang City signed a cooperation agreement for the management of water resources, which included the development and use of Wendit Spring; the agreement is valid for 20 years, though it may undergo changes, as it will be evaluated every 3 years.[46]

Further, Government Regulation No. 27 of 2014 provides for the utilization of central-, regional-, and provincial-government assets for the provision of infrastructure in partnership with business entities. Article 39 of this regulation stipulates that the selection of a private partner shall follow the applicable regulations, and that the partnership could last up to 50 years, subject to other provisions.[47]

[46] E.E. Nirwana, Y.S. Hijri, and M. Kamil. 2019. Government Cooperation in Malang City and Malang Regency Government in Management Water Resources Wendit. *Journal of Local Government Issues (LOGOS)*. 2 (1). pp. 1–17.

[47] Government of Indonesia. Government Regulation No. 27 of 2014 on the Management of State/Regional Property. https://www.kopertis7.go.id/uploadperaturan/pp2014_027.pdf (in Indonesian).

Currently, the infrastructure procurement cooperation (KSPI) procedure for state assets falls under Ministry of Finance (MOF) Regulation No. 164 of 2014, as amended by MOF Regulation number 65 of 2016 on the Implementation Procedures for the Utilization of State-Owned Property for Infrastructure Procurement. According to Article 14 of MOF Regulation No. 65 of 2016, the parties that may partner with the government to utilize state-owned property are (i) business or legal entities allowed by the prevailing laws to be lessors of state-owned property; (ii) all parties allowed by the prevailing laws to engage in utilization cooperation (KSP); and (iii) state-owned enterprises (SOEs), regionally owned enterprises (ROEs), private limited liability companies, foreign legal entities, and cooperatives engaging in KSPI.[48] These provisions allow several ways for regional governments to engage in KSPI with the private sector, including with foreign entities.

Sectors for Potential Public–Private Partnerships with Local Government Projects

Subnational governments have been active in implementing infrastructure projects, often with the support of the PPP Unit and PT Sarana Multi Infrastruktur (PT SMI). A select list of projects being implemented by subnational governments, according to PPP Book 2019, is provided in Table 49.

Table 49: Public–Private Partnership Projects Being Implemented by Subnational Governments, 2019

GCA	Preparation Agency	Project Title	Estimated Project Cost ($)	Estimated Project Cost (Rp)	Estimated Concession Period	Status
Municipal government of Surakarta	(i) Municipal government of Surakarta (ii) Ministry of National Development Planning (iii) PT SMI through a PDF under the Ministry of Finance	Surakarta Street Lighting	28.40 million (10 years) 45.90 million (20 years)	394 billion (10 years) 637 billion (20 years)	10 years 20 years	Preparation
Regional Development Planning Agency of the city of Medan	PT SMI through a PDF under the Ministry of Finance	Pirngadi Hospital	50.0 million	694 billion	12–17 years	Preparation
Regional government of Nangroe Aceh Darussalam	IIGF through a PDF under the Ministry of Finance	Zainoel Abidin General Hospital	142.8 million (estimated)	1.38 trillion (estimated)		Planning
Government of West Java Province		Nambo Regional Waste Management	4.8 million	67 billion	25 years	Construction

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[48] Rivai Triprasetio & Partners. Minister of Finance Has Amended Regulation concerning Implementation Procedures on Utilization of State Owned Property for Infrastructure Procurement: Opportunity for Foreign Investors. http://www.rtnplaw.com/en/publications/project-infrastructure/opportunity-for-foreign-investors.

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GCA	Preparation Agency	Project Title	Estimated Project Cost ($)	Estimated Project Cost (Rp)	Estimated Concession Period	Status
City Development Planning Agency of Medan	PT SMI through a PDF under the Ministry of Finance	Medan Municipal Transport (development of BRT and LRT)	LRT: 824.80 million BRT: 66.33 million	LRT: 11.5 trillion BRT: 921 billion	34 years 34 years	Preparation
City of Semarang	Municipal government of Semarang Directorate General of Railways, Ministry of Transportation	Development of LRT in Semarang	1.0 billion	14.5 trillion	50 years	Preliminary study
Municipal government of South Tangerang	Industry and Trade Department	Development/ Revitalization of Ciputat Market	17.24 million	239 billion	20 years	Preparation

BRT = Bus Rapid Transit, GCA = governing contracting agency, IIGF = Indonesia Infrastructure Guarantee Fund, LRT = Light Rail Transport, PDF = project development facility, PT SMI = PT Sarana Multi Infrastruktur, Rp = Indonesian rupiah (national currency).

Note: An empty cell indicates that the column head does not apply.

Source: https://library.pppknowledgelab.org/documents/5826/download

Indonesia has a decentralized form of government, which enables the provinces, regions, and cities to plan and implement their projects. These governments are thus empowered to undertake projects across various sectors, in consultation with the MOF and PPP unit.

Revenues for Local Governments

The Regional Revenue and Expenditure Budget (APBD) is an annual financial plan approved by the People's Representative Council. The APBD, which is set by provincial and regional regulations, covers one year, from 1 January to 31 December.

The APBD consists of:

- regional government income, including:
  - Original Regional Revenue (PAD), which includes local taxes, regional levies, the profits from regional wealth management, and other acceptance;
  - the Balance Fund, which includes the yield fund or the revenue share fund, comprising a percentage allocation from the central government's income in order to implement decentralization;
  - the General Allocation Fund (DAU) comprising allocations from the central government;
  - the Special Allocation Fund, comprising allocations to specific provinces for special activities; and
  - other legitimate sources of income, such as grants, emergency funds, provincial and regional tax revenues, special adjustments and autonomy funds, and financial assistance from provincial or regional governments.

- regional government expenditure, for funding all provincial and regional obligations and activities; and
- financing, including any loans to be paid back and/or expenses, both in the year of the relevant budget and in the subsequent fiscal years.

The key sources of local revenue include

- user charges and levies that are, in accordance with Law No. 28 of 2009 on Local Taxes and Charges, provincial and regional levies as payment for certain services or permits provided by local governments for personal or agency use (e.g., charges for public services, business services, and licensing);
- property taxes—on land and buildings;
- excise taxes; and
- personal income taxes.

Borrowing by Local Governments

Subnational governments may raise funds based on a feasibility assessment, which is itself based on (i) the opinion of the Audit Board, (ii) an absence of debt arrears, and (iii) the debt-service coverage ratio. Loans by subnational governments are an alternative to the usual sources of APBD funding, and can be used to cover APBD deficits, finance expenditures, and cash-flow shortages. As of May 2019, 57 municipal, regency, and district governments have utilized regional loans (Table 50), out of the 476 such governments that are eligible to take out loans.

Table 50: Loans to Subnational Governments, 2015–2019

Parameter	2015	2016	2017	2018	2019 (up to May 2019)
Total provincial and regional loan realization (Rp)	478.4 billion	373.1 billion	2.09 trillion	6.07 trillion	1.1 billion
Total provincial and regional loan realization ($ billion)	34.4	26.9	150.5	437.1	72.7
Regions (number)	7	3	11	29	7
Utilization	Roads Hospitals	Roads Hospitals Market	Roads Hospitals	Roads Hospitals Markets SPAM	Roads Hospitals Markets

Rp = Indonesian rupiah (national currency), SPAM = Drinking Water Supply System.

Source: Government of Indonesia, Ministry of Finance, Directorate General of Fiscal Balance. 2019. *Fiscal Decentralization: Indonesia's Experience*. Bangkok, Thailand. https://www.unescap.org/sites/default/files/Day%201_Session%202_Indonesia_%20Fiscal%20Decentralization%20In%20Indonesia.pdf.

Since the introduction of Law No. 17 of 2003 on State Finance, provincial, regional, and local governments have been allowed to borrow from both domestic and foreign markets, subject to the requisite approvals. However, a government's debt must not exceed 75% of the previous year's budget revenues.

Budgetary Allocations to Local Governments

To ensure that the provincial, regional, and local governments have sufficient resources to undertake expanded responsibilities under the decentralization program, a new system for intergovernmental funding

transfers was introduced, guaranteeing at least 26% of net domestic revenues to provincial, regional, and local governments (with 90% for districts and municipalities), plus a share of natural resource revenues in the form of intergovernmental transfers.

Assessment of Indonesia's Public Financial Management System

The latest assessment of the Public Financial Management System (PFMS) in Indonesia, based on the Public Expenditure and Financial Accountability (PEFA) framework, resulted in an **overall rating of B** for Indonesia—on a four-point scale from A, the best score, to D, the worst—for "Transfers to Subnational Governments" (from the national government). The two sub-indicators used to establish this overall rating were:

- System for allocating transfers—for which Indonesia received a score of C, and
- Timeliness of information on transfers—for which Indonesia received a score of A.

Transfers to subnational governments constitutes about 50% of the national budget in Indonesia (excluding subsidies and interest payments). The main institution responsible for managing intergovernmental transfers is the Directorate General of Fiscal Balance (DJPK), under the Ministry of Finance. The DJPK is responsible for preparing the presidential decrees on the allocations of all intergovernmental transfers to individual subnational governments, and for overseeing the disbursement of these transfers. The Ministry of Home Affairs facilitates the implementation through such measures as ensuring that technical guidelines are issued in time for the subnational governments to implement their budgets.

For further details on PEFA assessments of the PFMS in Indonesia, visit: https://www.pefa.org/country/indonesia.

Source: World Bank. 2018. *Indonesia Public Expenditure and Financial Accountability (PEFA): Assessment Report 2017*. Washington, DC and Jakarta, Indonesia: World Bank. https://www.pefa.org/sites/pefa/files/assessments/reports/ID-May18-PFMPR-Public-with-PEFA-Check.pdf.

In addition to the budgetary allocations, to support the capacity of subnational governments to undertake infrastructure projects, the government has set up the Rural Infrastructure Development Fund, with the support of the World Bank and the Asian Infrastructure Investment Bank (AIIB).[49] The Fund is managed by the Indonesia State-Owned Infrastructure Financing Company (PT-SMI) on behalf of GoI, and is disbursed to those subnational governments that meet certain predefined eligibility criteria. The Fund has two components.

- Regional Infrastructure Development Fund (RIDF), which provides direct loans in the form of senior debt to subnational governments possessing sufficient fiscal and borrowing capacity, in accordance with the laws and regulations; and
- Project Development Fund, which uses financing facilities to enhance capacity development and provide assistance to subnational governments during the project preparation process, through the support of consultants who have sectoral expertise, as well as experience in feasibility assessment projects, detailed engineering design, and other functions.[50]

Credit Rating of Local Governments

PEFINDO is the largest credit rating agency in Indonesia by market share, and it also offers municipality ratings. The Special Capital Region (DKI) of Jakarta was given a credit rating of "$_{id}$AA+" by PEFINDO in 2012, and there have been no known changes since then.

[49] Government of Indonesia, Ministry of Finance, PT SMI. https://ptsmi.co.id/.
[50] PT SMI. https://ptsmi.co.id/.

DKI Jakarta's rating reflected a strong financial and budget performance, with a "stable" outlook.[51] It also implied strong economic growth, economic diversity, strong locally sourced revenues, and a strong liquidity position. However, the rating was constrained by the city's sizeable capital needs for infrastructure development, and by the its relatively weak financial management, especially in the areas of debt management, financial transparency, and disclosure.

Case Study—Bandar Lampung Water Supply Public–Private Partnership Project

Background

Indonesia's National Medium-Term Development Plan (RPJMN) 2014–2019 set the goal of making drinking water services available to 100% of the population. However, in 2015, in the city of Bandar Lampung, the capital of Lampung province, only 20% of the households had access to drinking water, and most of the households in the area were using groundwater for their daily needs. The purpose of the Bandar Lampung Water Supply System project was to provide reliable water supplies in accordance with the required technical standards, in order to meet people's needs and support economic activity in Bandar Lampung. The project is expected to increase the water supply coverage in Bandar Lampung from 20% to 46% by 2024. Bandar Lampung Municipality authorized the local public water utility (PDAM), Way Rilau Regional Water Supply Company, to award the project to a private concern on a PPP basis.[52]

Physical Infrastructure

The project involves the financing and construction of a bulk water supply system for Bandar Lampung. The water system will have a raw water-intake capacity of 825 liters per second (lps), a potable water treatment plant with a 750-lps capacity, a reservoir, and a 425-kilometer (km) water distribution network. The construction of a 21 km transmission pipe (to the reservoir), a 9 km main distribution network, and 32 km of carrier piping is also part of the project.

Description of the Public–Private Partnership

In 2018, the Way Rilau Regional Water Supply Company awarded a Build–Operate–Transfer (BOT) project to Bangun Cipta Kontraktor—Bangun Tjipta Sarana. The contract was for 2 years of construction and 25 years of operations. A special purpose vehicle (SPV), Adhya Tirta Lampung, was established to undertake the project. The division of responsibilities was as follows:

- The private sector partner is responsible for the financing, construction, and operations. It would receive revenues from the concession authority (which is the PDAM) for the supply of bulk water, and the payments would be on take-or-pay basis.
- The SPV would undertake the construction of the water treatment plant, transmission piping, carrier piping, and of the 425-km water distribution network. The SPV would also supply bulk water to the reservoirs.
- The public sector partner is responsible for the distribution of the water from the reservoirs and for collecting the user fees. In addition, the public sector partner is to provide the right-of-way for laying the piping.

51 PEFINDO. https://www.pefindo.com/.

52 BAPPENAS. *Public–Private Partnership: Infrastructure Projects Plan in Indonesia*. Jakarta. (3 years: 2017–2019). https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

The allocation of risks to the private sector and public sector partners is presented in Table 51.

Table 51: Risk Allocations to the Public and Private Sectors under the Bandar Lampung Water Supply Public–Private Partnership Project, by Risk Type

Risk Category	Private	Public	Shared
Construction	✓		
Supply of bulk water output	✓		
Distribution		✓	
Demand		✓	
User charges		✓	
Hydrological	✓		
Environmental and social			✓
Land acquisition		✓	
Right-of-way		✓	

✓ = Yes

Source: BAPPENAS. Public–Private Partnership: Infrastructure Projects Plan in Indonesia. Jakarta. (3 years: 2017–2019). https://www.bappenas.go.id/files/9314/8767/3599/PPP_BOOK_2017.pdf, https://www.bappenas.go.id/files/PPP%20Book/PPP%20Book%202018%20FINAL.pdf. https://library.pppknowledgelab.org/documents/5826/download.

The project development facility (PDF) was provided by the Ministry of Finance through PT SMI, for the purpose of developing the full business case and assisting with the transaction.

Project Finance

The estimated project cost is $76.37 million.[53]

Of the total estimated amount, $29.84 million would be invested by various government entities in the development of the project, for the acquisition of land, right-of-way, etc.

- The national government would provide a viability gap fund (VGF) amounting to $18.78 million to improve the project's financial feasibility and control costs.
- Remaining $27.75 million would be raised by the private sector partner by means of debt and equity financing.
- The project has reportedly received debt financing of around $21 million, with the remainder provided as equity.

Project Construction

Project construction began on 31 December 2019, and operations commenced in August 2020.

[53] Source: Ministry of Finance, Government of Indonesia. *Government Financial Facilities as PPP Enablers: Case Study of Bandar Lampung Water Project, Directorate General of Budget Financing and Risk Management*. August 2019. https://ppp.gov.ph/wp-content/uploads/2019/08/UNESCAP_2ndMTNG_Session3-INDONESIA.pdf.

Project Revenues

The project is expected to earn revenues from the payments made by the concession authority, which is the PDAM. Further, the payments to be made by the PDAM will be backed by a guarantee from the Indonesia Infrastructure Guarantee Fund (IIGF).

Key Lessons

- The first tender for the Bandar Lampung Water Supply PPP project was released in 2015. No bids were received ahead of the deadline, and the project feasibility was reviewed. Based on the expertise provided by the PDF, the feasibility reports were revised, and the tender was relaunched in 2017. At that point, the project received interest from many private sector companies.
- Market sounding is an important part of project preparation. The market sounding conducted for this project helped the concession authority understand the concerns of the private sector participants and provide the necessary support via the VGF.
- PDAMs have limited earning potential, given the challenges they face, such as the high levels of non-revenue water (due to leakages and theft) and the limited scope for increasing the tariff. These factors lead to a high level of counterparty payment risk for the project SPV, which depends on payments from the PDAM for the supply of the bulk water. Thus, the project has obtained a guarantee from the IIGF for timely payments from the PDAM.

Appendixes

1 Methodology

Research Period

The research was carried out in 2020.

List of Indicators

Table A1.1 through Table A1.6 present a list of indicators for each major topic, including the definition and/or explanation of certain indicators where it is deemed necessary.

Table A1.1: Overview

Subcategory	Supporting Indicators	Units	Definition
Overview	None	Description	• Overview of the PPP legal and regulatory framework • Number of PPP projects reaching financial close from 1990 till end of 2019 across sectors • Total investment made in PPPs from 1990 to 2019 across sectors • Features of past PPP projects including the number of PPPs procured through various modes of PPP procurement • Number of PPP projects under preparation and procurement • Number of PPP projects supported by the government • Payment mechanism for PPPs • Foreign sponsor participation in PPPs from 1990 to 2019 • Major sponsors active in the country's infrastructure sector • Challenges associated with the PPP landscape in the country

Table A1.2: National Public–Private Partnership Landscape

Subcategory	Supporting Indicators	Units	Definition
National PPP legal and regulatory framework	Does the country have—	Yes/No/Not Applicable/ Unavailable	Details on the legal and regulatory framework applicable to PPPs and its evolution since the introduction of PPPs in the country Details on other supporting laws and regulations governing PPPs in the country
	• National PPP laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Public financial management laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Sector-specific laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Procurement laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Environmental laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Laws and regulations for social compliance?	Yes/No/Not Applicable/ Unavailable	
	• Laws and regulations governing land acquisition and ownership?	Yes/No/Not Applicable/ Unavailable	
	• Taxation laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Employment laws and regulations?	Yes/No/Not Applicable/ Unavailable	
	• Licensing requirements?	Yes/No/Not Applicable/ Unavailable	
	Evolution of the PPP legal and regulatory framework in the country	Description	
	What are the other components of the PPP legal and regulatory framework?	Description	
PPP types	Number of PPP types defined in the PPP regulations	Number	Details on the PPP types allowed to be used as per PPP legal and regulatory framework. In case the PPP legal and regulatory framework doesn't specify the PPP types, this section provides the details on the specific PPP types which have been adopted for various PPP projects at various stages of the PPP life cycle.
Eligible sectors	• Transportation infrastructure	Yes/No/Not Applicable/ Unavailable	Details on various infrastructure sectors for which projects could be procured through the PPP route as per the PPP legal and regulatory framework
	• Road infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Water resources and irrigation infrastructure	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Water supply infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Infrastructure for centralized water waste management systems	Yes/No/Not Applicable/ Unavailable	
	• Infrastructure for local water waste management system	Yes/No/Not Applicable/ Unavailable	
	• Infrastructure for waste management system	Yes/No/Not Applicable/ Unavailable	
	• Telecommunication and informatics infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Energy and electricity infrastructure including renewable energy	Yes/No/Not Applicable/ Unavailable	
	• Energy conservation infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Urban facilities infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Zone infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Tourism infrastructure (e.g., tourism information center)	Yes/No/Not Applicable/ Unavailable	
	• Education facilities, research and development infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Health infrastructure	Yes/No/Not Applicable/ Unavailable	
	• Public housing infrastructure	Yes/No/Not Applicable/ Unavailable	
Public–private partnership institutional framework	Does the country have a national PPP unit?	Yes/No/Not Applicable/ Unavailable	Details on the PPP institutional framework including availability of a PPP Unit, functions of the PPP Unit, principal public entities associated with PPPs and their respective functions, and details of public entities responsible for PPP project identification, appraisal, approval, oversight, and monitoring
	What are the functions of the national PPP unit?		
	• Supporting the design and operationalization of the National PPP Enabling Framework?	Yes/No/Not Applicable/ Unavailable	
	• Helping develop a national PPP pipeline?	Yes/No/Not Applicable/ Unavailable	
	• Supporting the arrangement of funding for project preparation (budgetary allocations, technical assistance funding from multilateral development agencies, operating a dedicated project preparation/project development fund)?	Yes/No/Not Applicable/ Unavailable	
	• Guidance for project preparation to and coordination with the government agencies responsible for sponsoring the projects?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Making recommendations to the PPP Committee and/or other approving authorities to provide approvals associated with various stages of the PPP process?	Yes/No/Not Applicable/ Unavailable	
Entities responsible for PPP project identification, approval, and oversight	Who is responsible for identifying, preparing, and procuring the PPP projects?	Description	
	Is there a PPP Committee for providing approvals at various stages of PPP projects?	Yes/No/Not Applicable/ Unavailable	
	Who are the approving authorities other than the PPP Committee for the PPP projects?		
	Does the country have an independent think tank for various PPP planning, budgeting, and policy decisions?	Yes/No/Not Applicable/ Unavailable	
	Is there a legislature for the PPP program oversight?	Yes/No/Not Applicable/ Unavailable	
Entities responsible for PPP project monitoring	Is there an entity for monitoring of PPP projects post commercial close?	Yes/No/Not Applicable/ Unavailable	
	Is there an entity for monitoring and management of fiscal risks and liabilities from PPP projects for the Ministry of Finance (MOF)?	Yes/No/Not Applicable/ Unavailable	
The public–private poartnership process	Does the PPP legal and regulatory framework provide for a PPP implementation process covering the entire PPP life cycle?	Yes/No/Not Applicable/ Unavailable	Details on various stages of the PPP process including PPP project identification, preparation, structuring, procurement, and management as per the PPP legal and regulatory framework in the country
	Does the Feasibility Assessment Stage cover—	Yes/No/Not Applicable/ Unavailable	
	• Technical feasibility?	Yes/No/Not Applicable/ Unavailable	
	• Socioeconomic feasibility?	Yes/No/Not Applicable/ Unavailable	
	• Environmental sustainability?	Yes/No/Not Applicable/ Unavailable	
	• Financial feasibility?	Yes/No/Not Applicable/ Unavailable	
	• Fiscal affordability assessment?	Yes/No/Not Applicable/ Unavailable	
	• Legal assessment?	Yes/No/Not Applicable/ Unavailable	
	• Risk assessment and PPP project structuring?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Value for Money assessment?	Yes/No/Not Applicable/ Unavailable	
	• Market sounding with stakeholders?	Yes/No/Not Applicable/ Unavailable	
	Is the PPP procurement plan required?	Yes/No/Not Applicable/ Unavailable	
	Is there a need to set up a separate PPP procurement committee?	Yes/No/Not Applicable/ Unavailable	
	Is competitive bidding the only method for selection of PPP private developer?	Yes/No/Not Applicable/ Unavailable	
	Is the prequalification stage necessary? Or does the PPP legal and regulatory framework allow flexibility to skip the pre-qualification stage?	Yes/No/Not Applicable/ Unavailable	
	Does the PPP legal and regulatory process provide the option to the preferred bidder for contract negotiations?	Yes/No/Not Applicable/ Unavailable	
	Does the PPP Legal and Regulatory Framework allow unsuccessful bidders to challenge the award/ submit complaints?	Yes/No/Not Applicable/ Unavailable	
	What is the maximum time allowed for submitting a complaint/challenging the award by unsuccessful bidders from the announcement of the preferred bidder?	Yes/No/Not Applicable/ Unavailable	
	Does the PPP legal and regulatory framework provide for transparency?	Yes/No/Not Applicable/ Unavailable	
	Which of the following are required to be published?	Yes/No/Not Applicable/ Unavailable	
	• Findings from the feasibility assessment?	Yes/No/Not Applicable/ Unavailable	
	• Procurement notice?	Yes/No/Not Applicable/ Unavailable	
	• Outcome of stakeholder consultations from market sounding?	Yes/No/Not Applicable/ Unavailable	
	• Clarifications to prequalification queries?	Yes/No/Not Applicable/ Unavailable	
	• Prequalification results?	Yes/No/Not Applicable/ Unavailable	
	• Clarifications to pre-bid queries?	Yes/No/Not Applicable/ Unavailable	
	• Results for the bid stage and selection of preferred bidder?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Final concession agreement to be entered between the government agency and the preferred bidder? And other PPP project agreements executed between government agency and preferred bidder?	Yes/No/Not Applicable/ Unavailable	
	• Confidentiality	Yes/No/Not Applicable/ Unavailable	
PPP standard operating procedures, tool kits, templates, and model bid documents	Does the country have PPP Guidelines/ PPP Guidance Manual?	Yes/No/Not Applicable/ Unavailable	Details on standard operating procedures and standard templates or model bidding documents available for PPPs, if any. Details on the key clauses in a PPP Agreement based on the review of select PPP Agreements already executed, and/or the review of the PPP legal and regulatory framework
	Does the PPP Guidelines/PPP Guidance Manual adequately cover the process, entities involved, roles and responsibilities of various entities, approvals required at various stages, and the timelines for the various stages of the PPP project life cycle?	Yes/No/Not Applicable/ Unavailable	
	What are the templates and checklists available in the PPP Guidelines/PPP Guidance Manual?	Yes/No/Not Applicable/ Unavailable	
	• Project Needs Assessment and Options Analysis checklist?	Yes/No/Not Applicable/ Unavailable	
	• Project Due Diligence checklist?	Yes/No/Not Applicable/ Unavailable	
	• Technical Assessment checklist?	Yes/No/Not Applicable/ Unavailable	
	• Environmental Assessment checklist?	Yes/No/Not Applicable/ Unavailable	
	• PPP Procurement Plan template?	Yes/No/Not Applicable/ Unavailable	
	Does the country have standardized/ model bidding documents for PPPs?	Yes/No/Not Applicable/ Unavailable	
	• Model Request for Qualification (RFQ) document?	Yes/No/Not Applicable/ Unavailable	
	• Model Request for Proposal (RFP) document?	Yes/No/Not Applicable/ Unavailable	
	• Model PPP/Concession Agreement?	Yes/No/Not Applicable/ Unavailable	
	• State Support Agreement?	Yes/No/Not Applicable/ Unavailable	
	• VGF Agreement?	Yes/No/Not Applicable/ Unavailable	
	• Guarantee Agreement?	Yes/No/Not Applicable/ Unavailable	
	• Power Purchase Agreement?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Capacity Take-or-Pay Contract?	Yes/No/Not Applicable/ Unavailable	
	• Fuel Supply Agreement?	Yes/No/Not Applicable/ Unavailable	
	• Transmission and Use of System Agreement?	Yes/No/Not Applicable/ Unavailable	
	• Performance-based Operations and Maintenance Contract?	Yes/No/Not Applicable/ Unavailable	
	• Engineering, Procurement and Construction Contract?	Yes/No/Not Applicable/ Unavailable	
	Does the country have standardized PPP agreement terms?	Yes/No/Not Applicable/ Unavailable	
	• PPP Family Indicator?	Yes/No/Not Applicable/ Unavailable	
	• PPP Mode Validity Indicator?	Yes/No/Not Applicable/ Unavailable	
	• PPP Suitability Filter?	Yes/No/Not Applicable/ Unavailable	
	• PPP Screening Tool?	Yes/No/Not Applicable/ Unavailable	
	• Financial Viability Indicator Model?	Yes/No/Not Applicable/ Unavailable	
	• Economic Viability Indicator Model?	Yes/No/Not Applicable/ Unavailable	
	• VFM Indicator Tool?	Yes/No/Not Applicable/ Unavailable	
	• Readiness Filter?	Yes/No/Not Applicable/ Unavailable	
	Is there a framework for monitoring fiscal risks from PPPs including the following?	Yes/No/Not Applicable/ Unavailable	
	• Process for assessing fiscal commitments?	Yes/No/Not Applicable/ Unavailable	
	• Process for approving fiscal commitments?	Yes/No/Not Applicable/ Unavailable	
	• Process for monitoring fiscal commitments?	Yes/No/Not Applicable/ Unavailable	
	• Process for reporting fiscal commitments?	Yes/No/Not Applicable/ Unavailable	
	• Process for budgeting fiscal commitments?	Yes/No/Not Applicable/ Unavailable	
	Are there fiscal prudence norms/thresholds to limit fiscal exposure to PPPs?	Yes/No/Not Applicable/ Unavailable	
	Is there a process for assessing and budgeting contingent liabilities from PPPs?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
Lender's security rights	Does the law specifically enable lenders the following rights:	Yes/No/Not Applicable/ Unavailable	The rights of lenders including the charge of project assets
	• Security over the project assets	Yes/No/Not Applicable/ Unavailable	
	• Security over the land on which they are built (land use right)	Yes/No/Not Applicable/ Unavailable	
	• Security over the shares of a PPP project company	Yes/No/Not Applicable/ Unavailable	
	• Can there be a direct agreement between the government and lenders?	Yes/No/Not Applicable/ Unavailable	
	• Do lenders get priority in the case of insolvency?	Yes/No/Not Applicable/ Unavailable	
	• Can lenders be given step-in rights?	Yes/No/Not Applicable/ Unavailable	
Termination and compensation	Does the law specifically enable compensation payment to the private partner in case of early termination due to:		Definition on whether the private player is eligible for compensation in case of PPP project termination due to various reasons
	• Public sector default or termination for reasons of public interest	Yes/No/Not Applicable/ Unavailable	
	• Private sector default	Yes/No/Not Applicable/ Unavailable	
	• Force majeure	Yes/No/Not Applicable/ Unavailable	
	• Does the law enable the concept of economic/financial equilibrium?	Yes/No/Not Applicable/ Unavailable	
	Does the law enable compensation payment to the private partner due to:	Yes/No/Not Applicable/ Unavailable	
	• Material adverse government action	Yes/No/Not Applicable/ Unavailable	
	• Force majeure	Yes/No/Not Applicable/ Unavailable	
	• Change in law	Yes/No/Not Applicable/ Unavailable	
Unsolicited PPP proposals	Does the PPP legal and regulatory framework allow submission and acceptance of unsolicited proposals?	Yes/No/Not Applicable/ Unavailable	Details on possibility of submission of unsolicited PPP proposals, and their treatment including, potential advantages provided to the unsolicited PPP proposal proponent at the PPP procurement stage
	What are the advantages provided to the project proponent for an unsolicited bid?		
	• Competitive advantage at bid evaluation?	Yes/No/Not Applicable/ Unavailable	
	• Swiss Challenge?	Yes/No/Not Applicable/ Unavailable	
	• Compensation of the project development costs?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	• Government support for land acquisition and resettlement cost?	Yes/No/Not Applicable/ Unavailable	
	Government support in the form of viability gap fund and guarantees?	Yes/No/Not Applicable/ Unavailable	
Foreign investor participation restrictions	Is there any restriction for foreign investors on:		Definition of whether there are any statutory restrictions on foreign equity investments and ownership in PPP projects
	• Land use/ownership rights as opposed to similar rights of local investors	Yes/No/Not Applicable/ Unavailable	
	• Currency conversion	Yes/No/Not Applicable/ Unavailable	
Dispute resolution	Does the country have a dispute resolution tribunal (DRT)?	Yes/No/Not Applicable/ Unavailable	Definition of the dispute resolution process and mechanisms available in the country
	Does the country have an institutional arbitration mechanism?	Yes/No/Not Applicable/ Unavailable	
	Can a foreign law be chosen to govern PPP contracts?	Yes/No/Not Applicable/ Unavailable	
	What dispute resolution mechanisms are available for PPP agreements?		
	• Court litigation	Yes/No/Not Applicable/ Unavailable	
	• Local arbitration	Yes/No/Not Applicable/ Unavailable	
	• International arbitration	Yes/No/Not Applicable/ Unavailable	
	Has the country signed the New York Convention on the Recognition and Enforcement of Foreign Arbitral Awards?	Yes/No/Not Applicable/ Unavailable	
Environmental and social issues	Is there a local regulation establishing a process for environmental impact assessment?	Yes/No/Not Applicable/ Unavailable	Details on whether the legal and regulatory framework governing PPPs stipulates a mechanism for managing the environmental impact of a PPP project, including the potential environmental issues which could be caused by a PPP project
	Is there a legal mechanism for the private partner to limit environmental liability for what is outside of its control or caused by third parties?	Yes/No/Not Applicable/ Unavailable	Deliberation on whether a private partner can limit the circumstances where it is penalized for breaching environmental standards where such a breach is not within its control. For example, a wastewater treatment plant operator will wish to avoid prosecution or even liability

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Subcategory	Supporting Indicators	Units	Definition
			for pollution caused by a pollutant in the influent which the treatment plant cannot treat, or will at least want to have the power to pursue the polluter to stop the pollution and/or obtain compensation.
	Is there a local regulation establishing a process for social impact assessment?	Yes/No/Not Applicable/ Unavailable	Details on whether the legal and regulatory framework governing PPPs stipulates a mechanism for managing the social impact of a PPP project, including the potential social issues which could be caused by a PPP project
	Is there involuntary land clearance for PPP projects?	Yes/No/Not Applicable/ Unavailable	Deliberation on whether land expropriation is possible for PPP projects
Land rights	Which of the following is permitted to the private partner:		Definition of various mechanisms through which landownership and/or land use rights could be provided to the private partner in respect of the project site for a PPP project Details on land records and registration which could be provided to the private partner
	• Transfer land lease/use/ownership rights to third party	Yes/No/Not Applicable/ Unavailable	
	• Use leased/owned land as collateral	Yes/No/Not Applicable/ Unavailable	
	• Mortgage leased/owned land	Yes/No/Not Applicable/ Unavailable	
	Is there a legal mechanism for granting wayleave rights, for example, laying water pipes or fibre cables over land occupied by persons other than the government or the private partner?	Yes/No/Not Applicable/ Unavailable	
	Is there a land registry/cadastre with public information on land plots?	Yes/No/Not Applicable/ Unavailable	
	Which of the following information on land plots is available to the private partner:	Yes/No/Not Applicable/ Unavailable	
	• Appraisal of land value	Yes/No/Not Applicable/ Unavailable	
	• Landowners	Yes/No/Not Applicable/ Unavailable	
	• Land boundaries	Yes/No/Not Applicable/ Unavailable	
	• Utility connections	Yes/No/Not Applicable/ Unavailable	
	• Immovable property on land	Yes/No/Not Applicable/ Unavailable	
	• Plots classification	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
Government financial support for PPP projects	Is there a dedicated government financial support mechanism for PPP projects?	Yes/No/Not Applicable/ Unavailable	Details on various mechanisms of government financial support available to make PPP projects financially viable Salient features of government financial support mechanisms available
	What are the instruments of government financial support available under this government financial support mechanism?		
	• Capital grant	Yes/No/Not Applicable/ Unavailable	
	• Operations grant	Yes/No/Not Applicable/ Unavailable	
	• Annuity/availability payments	Yes/No/Not Applicable/ Unavailable	
	• Guarantees to cover	Yes/No/Not Applicable/ Unavailable	
	– Currency inconvertibility and transfer risk	Yes/No/Not Applicable/ Unavailable	
	– Foreign exchange risk	Yes/No/Not Applicable/ Unavailable	
	– War and civil disturbance risk	Yes/No/Not Applicable/ Unavailable	
	– Breach of contract risk	Yes/No/Not Applicable/ Unavailable	
	– Regulatory risk	Yes/No/Not Applicable/ Unavailable	
	– Expropriation risk	Yes/No/Not Applicable/ Unavailable	
	– Government payment obligation risk	Yes/No/Not Applicable/ Unavailable	
	– Credit risk	Yes/No/Not Applicable/ Unavailable	
	– Minimum demand/revenue risk	Yes/No/Not Applicable/ Unavailable	
	– Risk of making annuity/availability payments in a timely manner	Yes/No/Not Applicable/ Unavailable	
	What are the caps/ceilings for the government financial support under each of the abovementioned government financial support instruments?		
	Is there a minimum PPP project size (investment) for a PPP project to be eligible for receiving government financial support?	Yes/No/Not Applicable/ Unavailable	
	Are there minimum financial commitment requirements for the private developer equity before the government support could be drawn?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	Is the government financial support required, and an allowed bid parameter for PPP projects?	Yes/No/Not Applicable/ Unavailable	
	Are unsolicited PPP proposals eligible to receive government financial support?	Yes/No/Not Applicable/ Unavailable	
	Are there standard operating procedures for providing government financial support to PPP projects?	Yes/No/Not Applicable/ Unavailable	
	• Appraisal and approval process	Yes/No/Not Applicable/ Unavailable	
	• Budgeting process	Yes/No/Not Applicable/ Unavailable	
	• Disbursement process	Yes/No/Not Applicable/ Unavailable	
	• Monitoring process	Yes/No/Not Applicable/ Unavailable	
	• Accounting, auditing, and reporting process	Yes/No/Not Applicable/ Unavailable	
	Who are the signatories to the Government Financial Support Agreement?		
	Who is responsible for monitoring the performance of PPP projects availing government financial support?	Yes/No/Not Applicable/ Unavailable	
	• Independent engineer?	Yes/No/Not Applicable/ Unavailable	
	• Government agency?	Yes/No/Not Applicable/ Unavailable	
	• Ministry of Finance?	Yes/No/Not Applicable/ Unavailable	
	What are the other forms of government support available for PPP projects?	Yes/No/Not Applicable/ Unavailable	
	• Land acquisition funding support?	Yes/No/Not Applicable/ Unavailable	
	• Funding support for resettlement and rehabilitation of affected parties?	Yes/No/Not Applicable/ Unavailable	
	• Tax holidays/exemptions?	Yes/No/Not Applicable/ Unavailable	
	• Real estate development rights?	Yes/No/Not Applicable/ Unavailable	
	• Advertising and marketing rights?	Yes/No/Not Applicable/ Unavailable	
	• Interest rate/cost of debt subventions?	Yes/No/Not Applicable/ Unavailable	
	• Other subsidies and subventions?	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
	Can the other forms of government support be availed over and above the government financial support through various instruments listed above?	Yes/No/Not Applicable/ Unavailable	
Project development funding support	What are the various sources of funds for PPP project preparation?		Details on various sources through which funding could be availed for the development activities (preparation, structuring, and procurement) for a PPP project Details on stages of the PPP project development stage during which such funding could be availed and utilized, including payments to transaction advisors
	• Budgetary allocations	Yes/No/Not Applicable/ Unavailable	
	• Dedicated project preparation/project development fund	Yes/No/Not Applicable/ Unavailable	
	• Technical assistance from multilateral, bilateral, and donor agencies?	Yes/No/Not Applicable/ Unavailable	
	• Recovery of project preparation funding from the preferred bidder?	Yes/No/Not Applicable/ Unavailable	
	At what stage of the PPP project can the project preparation/development funding be availed by the government agency?		
	• Pre-feasibility stage	Yes/No/Not Applicable/ Unavailable	
	• Detailed feasibility stage	Yes/No/Not Applicable/ Unavailable	
	• Transaction stage	Yes/No/Not Applicable/ Unavailable	
	Is there a list of project preparation/project development activities toward which the project development funding can be utilized?	Yes/No/Not Applicable/ Unavailable	
	Can the project development funding be utilized to appoint transaction advisors for PPP projects?	Yes/No/Not Applicable/ Unavailable	
	Is there a specific process to be followed by government agencies to appoint transaction advisors?	Yes/No/Not Applicable/ Unavailable	
	What are the payment mechanisms for making payments to transaction advisors?	Yes/No/Not Applicable/ Unavailable	
	• Timesheet based	Yes/No/Not Applicable/ Unavailable	
	• Milestone based	Yes/No/Not Applicable/ Unavailable	
	Are there standard agreements and documents to avail project development funding?	Yes/No/Not Applicable/ Unavailable	
	Who are the signatories to the project development funding agreements?		

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Subcategory	Supporting Indicators	Units	Definition
PPP project statistics	Is there a National PPP database for the country?	Yes/No/Not Applicable/ Unavailable	Details on the key PPP statistics in the country, such as (i) availability of a PPP database showing distribution of PPP projects across sectors and across various stages of the PPP life cycle, and (ii) availability of a national PPP project pipeline and its alignment with the National Infrastructure Plan for the country
	Is the distribution of PPP projects across infrastructure sectors available?	Yes/No/Not Applicable/ Unavailable	
	Is the distribution of PPP projects across various stages of the PPP life cycle available?	Yes/No/Not Applicable/ Unavailable	
	Does the country publish a national PPP project pipeline?	Yes/No/Not Applicable/ Unavailable	
	At what frequency is the national PPP project pipeline published?		
	Is the national PPP project pipeline based on the National Infrastructure Plan for the country?	Yes/No/Not Applicable/ Unavailable	
Sources of PPP financing	Who are the typical entities financing PPP projects in the country?	Yes/No/Not Applicable/ Unavailable	Details on the sources of financing for PPP projects in the country Details on typical key financing terms for various sources of financing, banks active in project finance for the last 24 months, active PPP project sponsors in the country for the last 24 months, availability of derivatives market, and availability of credit rating agencies in the country
	• Private developers	Yes/No/Not Applicable/ Unavailable	
	• Construction contractors	Yes/No/Not Applicable/ Unavailable	
	• Institutional/financial/private equity investors	Yes/No/Not Applicable/ Unavailable	
	• Pension funds	Yes/No/Not Applicable/ Unavailable	
	• Insurance companies	Yes/No/Not Applicable/ Unavailable	
	• Banks	Yes/No/Not Applicable/ Unavailable	
	• Non-banking financial corporation/ financial institutions	Yes/No/Not Applicable/ Unavailable	
	• Donor agencies	Yes/No/Not Applicable/ Unavailable	
	• Government agencies and state-owned enterprises	Yes/No/Not Applicable/ Unavailable	
	What is the distribution of financing among these entities financing PPP projects?		
	Does the country have the history/track record of issuing bonds by infrastructure projects?	Yes/No/Not Applicable/ Unavailable	
	How many infrastructure projects/private developers for infrastructure projects have raised funding through bond issuances?	Number	
	What is the value of funding raised through capital markets by PPPs?	Number	

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Subcategory	Supporting Indicators	Units	Definition
	Does the country have a matured derivatives market to hedge certain risks associated with PPPs?	Yes/No/Not Applicable/ Unavailable	
	Does the country have a national development bank?	Yes/No/Not Applicable/ Unavailable	
	Does the country have credit rating agencies to rate infrastructure projects?	Yes/No/Not Applicable/ Unavailable	
	Typically, what are the credit ratings achieved/received by infrastructure projects?	Yes/No/Not Applicable/ Unavailable	
	Is there a threshold credit rating for infrastructure PPPs below which institutional investors, pension funds, and insurance companies would not invest in infrastructure PPPs?	Yes/No/Not Applicable/ Unavailable	
	What is the typical funding model for infrastructure PPPs—corporate finance or project finance?		
	Are there regulatory limits/restrictions for the maximum exposure that can be taken by banks to infrastructure projects?	Yes/No/Not Applicable/ Unavailable	

Table A1.3: Sector-Specific Public–Private Partnership Landscape

Subcategory	Supporting Indicators	Units	Definition
Contracting agencies in the sector	None	Description	Details on which government agencies could act as the contracting agencies for a PPP project
Sector laws and regulations	None	Description	Details on the applicable sector laws and regulations for PPP projects including the sector regulators and their respective functions
Foreign investment restrictions in the sector	Maximum allowed foreign ownership of equity in greenfield projects	%	Details on the maximum allowed foreign equity investment in greenfield PPP projects in a particular sector
Standard contracts in the sector	PPP/concession agreement	Yes/No/Not Applicable/ Unavailable	Specifics of whether standard contracts are available for PPP projects in a particular sector
	Performance-based operation and maintenance contract	Yes/No/Not Applicable/ Unavailable	
	Engineering procurement and construction contract	Yes/No/Not Applicable/ Unavailable	

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Subcategory	Supporting Indicators	Units	Definition
Sector master plan	None	Description	Details on the master plan and/or road map adopted for infrastructure development in the sector by the national government and the corresponding line ministry Details on the pipeline of PPP projects for the sector aligned with the sector master plan and/or road map Details on the PPP projects under preparation and procurement in the sector
Features of past PPP projects	Number of PPP projects procured through various modes of PPP procurement—Direct Appointment, Unsolicited Bids, and Competitive Bids	Number	Features of past PPP projects based on supporting indicators in terms of the number and value (where applicable) of PPP projects for each supporting indicator
	Number and value of PPP projects reaching financial closure	Number	
	Number of PPP projects with foreign sponsor participation in absolute terms, and as a percentage of total number of PPP projects	Number	
	Number of PPP projects supported with various forms of government financial support—Viability Gap Fund, Government Guarantees, and Availability/ Performance Payments	Number	
	Number of PPP projects based on various types of payment mechanisms—User Charges, and Government Pay (Offtake)	Number	
Tariffs applicable to the sector	None	Description	Details on the indicative tariffs applicable in the sector based on the examples of select PPP or other projects operational in the sector
Typical risk allocation for PPP projects in the sector	Traffic risk	Yes/No/Not Applicable/ Unavailable	Details on the typical risk allocation between the government contracting agency and the private partner based on examples of select PPP projects which have achieved commercial close

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Subcategory	Supporting Indicators	Units	Definition
	Collection risk	Yes/No/Not Applicable/ Unavailable	
	Competition risk	Yes/No/Not Applicable/ Unavailable	
	Government payment risk	Yes/No/Not Applicable/ Unavailable	
	Environmental and social risk	Yes/No/Not Applicable/ Unavailable	
	Land acquisition risk	Yes/No/Not Applicable/ Unavailable	
	Permits	Yes/No/Not Applicable/ Unavailable	
	Geotechnical risk	Yes/No/Not Applicable/ Unavailable	
	Brownfield risk: inventories studies, property boundaries, project scope	Yes/No/Not Applicable/ Unavailable	
	Political risk	Yes/No/Not Applicable/ Unavailable	
	Force majeure	Yes/No/Not Applicable/ Unavailable	
	Foreign exchange risk	Yes/No/Not Applicable/ Unavailable	
	Construction risk	Yes/No/Not Applicable/ Unavailable	
Financing details for PPP projects in the sector	PPP projects with foreign lending participation	Number	Typical financing details based on past PPP projects on the lines of the supporting indicators
	PPP projects that received export credit agency/international financing institution support	Number	
	Typical debt: Equity ratio	Ratio	
	Time for financial closure	Months	
	Typical concession period	Years	
	Typical Financial Internal Rate of Return	%	
Challenges associated with PPPs in the sector	None	Description	Details on the PPP-related and sector-specific challenges faced by PPP projects in the sector

Table A1.4: Typical Sector-Specific Infrastructure Indicators for the Country

Subcategory	Supporting Indicators	Units	Definition
Roads	Length of the total road network	kilometers	
	Quality of road infrastructure	1(low) – 7(high)	
Railways	Length of total railway network	total route-km	
	Total number of passengers carried	Million passenger-km	
	Total volume of freight carried	Million ton-km	
	Quality of railways infrastructure	1(low) – 7(high)	
Ports	Total number of ports	Number	
	Total freight capacity of all ports	MTPA	
	Total container traffic at ports	TEUs	
	Quality of port infrastructure	1(low) – 7(high)	
	Quality of trade and transport-related infrastructure index	1=low to 5=high	
Airports	No. of airports	Number	
	Total passenger capacity	million passengers	
	Quality of air transport infrastructure	1 (low) – 7 (high)	
	Total number of projects with cumulative lending, grant, and technical assistance commitments in the transport sector	Number	
	Total amount of cumulative lending, grant, and technical assistance commitments in the transport sector	$ million	
Energy	Electric power consumption	kilowatt-hour per capita	
	Share of clean energy	% of total energy use	
	Access to electricity	% of population	
	Getting electricity (score out of 100)	Number	
	Energy imports	% of total energy use	
	Investment in energy with private participation	current $ million	
	Total number of projects with cumulative lending, grant, and technical assistance commitments in the energy sector	Number	
	Total amount of cumulative lending, grant, and technical assistance commitments in the energy sector	$ million	
Water and Wastewater	Improved water source access	% of population with access	
	Improved sanitation facilities access	% of population with access	
	Investment in water and sanitation with private participation	current $ million	

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Subcategory	Supporting Indicators	Units	Definition
	Total number of projects with cumulative lending, grant, and technical assistance commitments in water and other urban infrastructure and services	Number	
	Total amount of cumulative lending, grant, and technical assistance commitments in water and other urban infrastructure and services	$ million	
ICT	Telephone subscribers	per 100 inhabitants	
	Cellular Phone Subscribers	per 100 inhabitants	
	Cellular Network Coverage	% of population covered	
	Internet Subscribers	per 100 inhabitants	
	Internet Bandwidth per Internet User	kbps	
	Total number of projects with Cumulative Lending, Grant, and Technical Assistance Commitments in ICT sector	Number	
	Total amount of Cumulative Lending, Grant, and Technical Assistance Commitments in ICT sector	$ million	
Social infrastructure	Government Expenditure on Education	% of GDP	
	Education spending as % of government spending	%	
	Primary School Gross Enrollment	%	
	Adult Literacy Rate	%	
	Total number of projects with Cumulative Lending, Grant, and Technical Assistance Commitments in education sector	Number	
	Total amount of Cumulative Lending, Grant, and Technical Assistance Commitments in education sector	$ million	
	Total Health Expenditure	% of GDP	
	Health spending per capita	USD	
	Maternal Mortality Ratio (modeled estimates per 100,000 live births)	(per 100,000 live births)	
	Infant Mortality Rate	(below 1 year/per 1,000 live births)	
	Life Expectancy at Birth	(years)	
	Child Malnutrition	(% below 5 years old)	
	Total number of projects with Cumulative Lending, Grant, and Technical Assistance Commitments in health sector	Number	
	Total amount of Cumulative Lending, Grant, and Technical Assistance Commitments in health sector	$ million	
	Existing No. of Affordable Housing Units	Number	
	Affordable Housing Gap		

Table A1.5: Local Government Public–Private Partnership Landscape

Subcategory	Supporting Indicators	Units	Definition
Key indicators related to local governments in the country	Number of Subnational Governments (SNGs)		Details on the local governments using select key indicators on (i) the number and levels of local governments, (ii) the typical expenditure profile and heads, (iii) the typical revenue profile and heads, (iv) the typical debt profile and heads, and (v) grants and transfers from the higher levels of government
	– Municipal Level	Number	
	– Intermediate Level	Number	
	– Regional or State Level	Number	
	Total number of SNGs	Number	
	SNG Expenditure Profile	SNG Expenditure Profile	
	Total SNG Expenditure as % of GDP	%	
	– SNG Current Expenditure as % of GDP	%	
	– SNG Staff Expenditure as % of GDP	%	
	– SNG Investment as % of GDP	%	
	Total SNG Expenditure as % of the Total General Government (% of Total Public Expenditure)	%	
	– SNG Current Expenditure as a % of Total Current Expenditure of the General Government	%	
	– SNG Staff Expenditure as a % of Total Staff Expenditure of the General Government	%	
	– SNG Investment as a % of Total Investment of the General Government	%	
	Current Expenditure of SNG as a % of Total SNG Expenditure	%	
	Staff Expenditure of SNG as a % of Total SNG Expenditure	%	
	Investments of SNG as a % of Total SNG Expenditure	%	
	SNG Expenditure by Function	SNG Expenditure by Function	
	– General Public Services	%	
	– Defence	%	
	– Security and Public Order	%	
	– Economic Affairs	%	
	– Environmental Protection	%	
	– Housing and Community Amenities	%	
	– Health	%	
	– Recreation, Culture, and Religion	%	
	– Education	%	
	– Social Protection	%	

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Subcategory	Supporting Indicators	Units	Definition
	SNG Revenue Profile	SNG Revenue Profile	
	Total SNG Revenue as a % of GDP	%	
	– SNG Tax Revenue as a % of GDP	%	
	– SNG Grants and Subsidies as a % of GDP	%	
	– SNG Other Revenues as a % of GDP	%	
	Total SNG Revenue as % of Total General Government Revenue	%	
	– SNG Tax Revenue as a % of Total General Government Tax Revenue	%	
	– SNG Grants and Subsidies as a % of Total General Government Grants and Subsidies	%	
	– SNG Other Revenues as a % of Total Other Revenues	%	
	SNG Tax Revenue as a % of Total SNG Revenue	%	
	SNG Grants and Subsidies as a % of Total SNG Revenue	%	
	SNG Other Revenues as a % of Total SNG Revenue	%	
	SNG Debt Profile	SNG Debt Profile	
	Outstanding SNG Debt as % of GDP	%	
	Outstanding SNG Debt as % of Total Outstanding Debt of General Government	%	
	Parameters for transfers to the Subnational Governments from the National Government	Parameters for transfers to the Subnational Governments from the National Government	
	Score on transfers to Subnational Governments		
	– Score on system for allocating transfers		
	– Score on timeliness of information on transfers		
	– Score on extent of collection and reporting of consolidated fiscal data for general government		
	Value of Central Government transfers to Subnational Governments	% of the GDP	
	Value of Actual budgetary allocation to Subnational Governments from National Government	% of total expenditure	
	Value of Deviation of actual against the budgeted transfers to Subnational Governments	% of budgeted transfers	

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Subcategory	Supporting Indicators	Units	Definition
Local governance system	None	Description	Details on the local governance system in the country, including the various levels of local governments; their roles, responsibilities and functions; and the devolution of powers from the higher levels of government to these various levels of local governments.
Infrastructure development plan for local governments	None	Description	Details on the infrastructure development plans prepared by the local governments based on their capital investment projects in the pipeline, and the coverage of such infrastructure development plans.
PPP enabling framework for local governments	None	Description	Details on the PPP enabling framework applicable to local government PPP projects, including PPP legal and regulatory framework, PPP policy framework, and PPP institutional framework
Eligible sectors for PPPs for local governments	None	Description	Details on the eligible sectors in which PPPs could be undertaken by local government as government contracting agency
Revenues for local governments	None	Description	Details on the typical sources of revenue for local governments
Borrowings by local governments	None	Description	Details on the typical sources of debt financing available for local governments, the purpose for which borrowed funds could be used, the terms of such borrowings, and the borrowing exposure of select local governments
Budgetary allocation to local governments	None	Description	Details on the budgetary allocations and transfers to the local governments from the higher levels of government

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Subcategory	Supporting Indicators	Units	Definition
Credit rating of local governments	None	Description	Details on the precedence of local governments being rated by credit rating agencies in the country Details of credit ratings obtained by select local governments in the past
Case study on a local government PPP	None	Description	A case of a PPP project undertaken by a local government in the past, which covers details on project background, project assets, PPP structure for the project, risk allocation among the parties for the project, project finance and project revenue details, and key learnings from the PPP project

Table A1.6: Critical Macroeconomic and Infrastructure Sector Indicators for the Country

Subcategory	Supporting Indicators	Units	Definition
Critical macro-economic and infrastructure sector indicators	Total population	million	Details of major macroeconomic indicators for the country
	Average annual population growth rate	%	
	Population density	persons per square kilometer (km^2) of surface area	
	Urban population	% of total population	
	Surface area	'000 km^2	
	Unemployment rate	%	
	Proportion of population below $1.90 purchasing power parity (PPP) a day	%	
	Nominal gross domestic product (GDP)	$ billion	
		%	
	Annual growth rate of GDP (2019)	%	
	Annual growth rate of GDP (2020 forecast)	%	
	Annual growth rate of GDP (2021 forecast)	%	
	GDP at purchasing power parity (PPP) per capita	$ at PPP	
	GDP at current market prices	$ billion	
	Gross fixed investment at current market prices	% of GDP	
	Per capita gross national income (GNI), Atlas Method	$	
	Inflation rate (2019)	%	

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Subcategory	Supporting Indicators	Units	Definition
	Inflation rate (2020 forecast)	%	
	Inflation rate (2021 forecast)	%	
	Current account (2019)	% of GDP	
	External trade, goods, value of imports, CIF (2018)	$ billion	
	External trade, goods, value of exports, FOB (2018)	$ billion	
	CPI % change over 2018	% of CPI in 2018	
	Real effective exchange rate		
	Investment in energy with private sector participation	Current $ million	
	Investment in transport with private sector participation	Current $ million	
	Investment in water and sanitation with private sector participation	Current $ million	
	Logistics Performance Index (LPI) rank	Number	
	Logistics Performance Index (LPI) score	Number	
	Customs rank	Number	
	Customs score	Number	
	Infrastructure rank	Number	
	Infrastructure score	Number	
	International shipments rank	Number	
	International shipments score	Number	
	Logistics competence rank	Number	
	Logistics competence score	Number	
	Tracking and tracing rank	Number	
	Tracking and tracing score	Number	
	Timeliness rank	Number	
	Timeliness score	Number	
	Structure of Output (% of GDP at current producer | basic prices)		
	Agriculture	%	
	Industry	%	
	Services	%	
	Consumer price index (national)	% annual change	
	Producer price index	% annual change	
	Wholesale price index (national)	% annual change	
	Retail price index	% annual change	
	Exchange rates (End of period)	Local currency - $	

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Subcategory	Supporting Indicators	Units	Definition
	ADF Portfolio		
	Total number of loans	Number	
	1. Sovereign	Number	
	2. Non-sovereign	Number	
	Net loan amount	$ million, cumulative	
	1. Sovereign	$ million, cumulative	
	2. Non-sovereign	$ million, cumulative	
	Disbursed amount	$ million, cumulative	
	1. Sovereign	$ million, cumulative	
	2. Non-sovereign	$ million, cumulative	
	Net foreign direct investment (FDI) inflows	% of GDP	
	Sovereign debt risk rating	Letter rating	
	Central government debt	% of GDP	
	CPIA quality of budgetary and financial management rating	1=low to 6=high	
	Ease of Doing Business		
	Ease of doing business rank	Number	
	Starting a business (rank)	Number	
	Dealing with construction permits (rank)	Number	
	Getting electricity (rank)	Number	
	Registering property (rank)	Number	
	Getting credit (rank)	Number	
	Protecting minority investors (rank)	Number	
	Paying taxes (rank)	Number	
	Trading across borders (rank)	Number	
	Enforcing contracts (rank)	Number	
	Resolving insolvency (rank)	Number	
	Corruption and Sustainable Development Index		
	Corruption Perceptions Index rank (out of 180)	Number	
	Corruption Perceptions Index score (out of 100)	Number	
	Sustainable Development Index rank	Number	
	Sustainable Development Index score	Number	
	Cumulative Lending, Grant, and Technical Assistance Commitments		
	Number of projects	Number	
	Total lending	$ million	
	GCI infrastructure score	out of 7	

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Subcategory	Supporting Indicators	Units	Definition
	EIU Infra-scope Index Score		
	PPP regulations score (out of 100)	Number	
	PPP regulations rank	Number	
	PPP institutions score (out of 100)	Number	
	PPP institutions rank	Number	
	PPP market maturity score (out of 100)	Number	
	PPP market maturity rank	Number	
	PPP financing score (out of 100)	Number	
	PPP financing rank	Number	
	Investment and business climate score (out of 100)	Number	
	Investment and business climate rank	Number	
Ease of Doing Business	Score of starting a business	(0-100)	Details on the various Ease of Doing Business parameters for the country based on the World Bank's Ease of Doing Business publication
	• Procedures	(number)	
	• Time	(days)	
	• Cost	(number)	
	• Paid-in min. capital	(% of income per capita)	
	Score of dealing with construction permits	(0-100)	
	• Procedures	(number)	
	• Time	(days)	
	• Cost	(% of warehouse value)	
	• Building quality control index	(0-15)	
	Score of getting electricity	(0-100)	
	• Procedures	(number)	
	• Time	(days)	
	• Cost	(% of income per capita)	
	• Reliability of supply and transparency of tariff index	(0-8)	
	Score of registering property	(0-100)	
	• Procedures	(number)	
	• Time	(days)	
	• Cost	(% of property value)	
	• Quality of the land administration index	(0-30)	
	Score of getting credit	(0-100)	
	• Strength of legal rights index	(0-12)	
	• Depth of credit information index	(0-8)	
	• Credit registry coverage	(% of adults)	
	• Credit bureau coverage	(% of adults)	

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Subcategory	Supporting Indicators	Units	Definition
	Score of protecting minority investors	(0-100)	
	• Extent of disclosure index	(0-10)	
	• Extent of director liability index	(0-10)	
	• Ease of shareholder suits index	(0-10)	
	• Extent of shareholder rights index	(0-6)	
	• Extent of ownership and control index	(0-7)	
	• Extent of corporate transparency index	(0-7)	
	Score of paying taxes	(0-100)	
	• Payments	(number per year)	
	• Time	(hours per year)	
	• Total tax and contribution rate	(% of profit)	
	• Post-filing index	(0-100)	
	Score of trading across borders	(0-100)	
	Time to export		
	• Documentary compliance	(hours)	
	• Border compliance	(hours)	
	Cost to export		
	• Documentary compliance	(USD)	
	• Border compliance	(USD)	
	Time to export		
	• Documentary compliance	(hours)	
	• Border compliance	(hours)	
	Cost to export		
	• Documentary compliance	(USD)	
	• Border compliance	(USD)	
	Score of enforcing contracts	(0-100)	
	• Time	(days)	
	• Cost	(% of claim value)	
	• Quality of judicial processes index	(0-18)	
	Score of resolving insolvency	(0-100)	
	• Recovery rate	(cents on the dollar)	
	• Time	(years)	
	• Cost	(% of estate)	
	• Outcome	(0 as piecemeal sale and 1 as going concern)	
	• Strength of insolvency framework index	(0-16)	

Comment of Financial Indicators

In regard to indicative loan terms presented in this publication, it should be noted that it is very difficult to generalize the loan terms as the data are dynamic. The data vary from one sector to another, and in a particular sector, the loan terms differ from one project to another depending on the project cash flows and the creditworthiness of the project sponsors. The loan terms are also driven by market forces, monetary policy, fiscal policy, and other macro-economic variables. Generally, international banks provide project finance in internationally convertible currency and the terms are broadly consistent across countries, given other risk factors are held constant, as country risk is the only risk factor. In general, some of the factors that determine pricing are

- exposure to market/revenue risk,
- exposure to foreign exchange risk,
- credibility of off-taker,
- credibility of sovereign,
- availability of export credit/multilateral support,
- "proven-ness" of sector and underlying technology, and
- financing market (such as global macroeconomic events) and regulations (i.e., Basel III).

It is understood in project finance that lenders take all securities including security over the "rights" of the concessionaire to operate the asset and collect revenue. The stability of the revenue stream is most important, and most international lenders will require a sovereign guarantee from the Ministry of Finance for the paying authority's obligations. In addition, from a commercial bank's perspective, such sovereign guarantee has to be further guaranteed/insured by export credit agencies and/or multilateral lending agencies.

In general, local banks lending in local currency will have less stringent requirements on a project; however, they will also offer a higher financing cost. From previous market sounding, local banks can generally cope with higher debt–equity ratios, lower debt-service coverage ratio, and no explicit sovereign guarantee where international lenders would require it. They can also cope with some level of revenue and fare risk where international banks demand a guaranteed offtake for greenfield projects. Also, very often banks have the appetite and capacity to finance public–private partnership (PPP) projects; however, the lack of well-prepared and structured projects limits the progress.

Capital markets are expected to play a major role in financing infrastructure PPPs, but are relatively underdeveloped in majority of the developing member countries (DMCs) covered. Capital markets have played a muted role in project financing in such DMCs. DMCs with a relatively matured PPP market and a relatively developed capital market have witnessed some PPPs issuing bonds and raising financing from capital markets. Institutional investors such as insurance companies and pension funds are restricted from taking exposure to PPP projects during construction period due to their internal investment norms and regulatory requirements to invest in investment grade projects and investment avenues, which majority of infrastructure PPPs do not attain during the construction period. Hence majority of such institutional investors take exposure to infrastructure PPPs during the operations period by buying out a part of the equity investment (as allowed by the PPP Agreement) of the project sponsors, or by retiring out bank financing for the project.

Comments on Data Sources

The research was carried out using publicly available sources, including

- government websites, reports, and publications, including national government line ministries and government contracting agencies;
- annual reports of national government line ministries and government contracting agencies;
- applicable laws and regulations (where regulations were available only in the local language, unofficial translations were used);
- websites and annual reports of sector regulators;
- Asian Development Bank (ADB) reports and publications;
- online publications of other multilateral development agencies;
- industry publications and databases such as *Inframation News* and *IJGlobal Project Finance & Infrastructure Journal*;
- publications and websites of reputable consultancy companies and law firms; and
- other publicly available reports, publications, and documents from authentic and globally acceptable sources.

Some of the widely used databases included

- World Bank Private Participation in Infrastructure (PPI) Database, https://ppi.worldbank.org/en/ppi;
- Inframation database https://www.inframationnews.com/;
- IJGlobal database, https://ijglobal.com/;
- PPP Knowledge Lab, https://pppknowledgelab.org/;
- the Economist Intelligence Unit (EIU) Infrascope Index, https://infrascope.eiu.com/;
- Global Infrastructure Hub, https://www.gihub.org/;
- Organisation for Economic Co-operation and Development (OECD), https://www.oecd.org/;
- TheGlobalEconomy.com, https://www.theglobaleconomy.com/;
- International Monetary Fund (IMF), https://data.imf.org/?sk=388dfa60-1d26-4ade-b505-a05a558d9a42;
- Doing Business, https://www.doingbusiness.org/;
- World Bank Public-Private-Partnership Legal Resource Center, https://ppp.worldbank.org/public-private-partnership/;
- World Economic Forum, *The Global Competitiveness Report*, http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf;
- Global Infrastructure Outlook, https://outlook.gihub.org/; and
- Trading Economics, https://tradingeconomics.com/.

Some of the other major sources used included:

- ADB, *Indonesia: Country Partnership Strategy (2016–2019)*, 2016, https://www.adb.org/documents/indonesia-country-partnership-strategy-2016-2019;
- Asia-Pacific Economic Cooperation (APEC) Secretariat, APEC Policy Support Unit, October 2019, *Peer Review and Capacity Building on APEC Infrastructure Development and Investment: Indonesia*. https://www.apec.org/Publications/2019/11/Peer-Review-and-Capacity-Building-on-APEC-Infrastructure-Development-and-Investment-Indonesia;
- Ministry of National Development Planning/National Development Planning Agency (BAPPENAS), *Public–Private Partnership: Infrastructure Projects Plan in Indonesia 2019* (PPP Book 2019), 2019, https://www.infrapppworld.com/report/indonesia-ppp-book-2019;
- Website of BAPPENAS, https://www.bappenas.go.id/id/;
- Website of the Indonesia Infrastructure Guarantee Fund (IIGF) - https://ptpii.co.id/; and
- PPP guidance materials:
  - World Bank, Benchmarking Infrastructure Development, https://bpp.worldbank.org/#5;
  - ADB, Stepping Up Investments for Growth Acceleration Program, https://www.adb.org/projects/documents/ino-stepping-up-investments-for-growth-acceleration-program-subprogram2-rrp; and
  - Melli Darsa & Co, New Presidential Regulation Regarding Acceleration of the Implementation of Strategic National Projects (article), *Lexology*, 29 February 2016, https://www.lexology.com/library/detail.aspx?g=9a5beb25-2129-4281-85a6-69547055f0a5.
  - https://ppp.gov.ph/wp-content/uploads/2020/01/PDMFS_200190128_REP_Revised-Guidelines-January-2020.pdf

A detailed list of sources is provided in the References section of this publication.

In addition to the above-mentioned sources, the research for this report was informed by the internal knowledge of CRISIL Infrastructure Advisory, based on various ongoing and completed PPP consultancy assignments in Indonesia; public sector officials; the ADB team from the Office of Public–Private Partnership (OPPP); the ADB Resident Mission for Indonesia; consultants to the ADB Resident Mission in Indonesia; various government agencies; and contributing legal firms and commercial banks.

It should be noted that, as the research relied primarily on information reported in public sources that have not been verified by the authors and may not be accurate or contain all the required information, there is the risk of inaccuracy and incompleteness, depending on the reliability of sources and the validity of the information used.

For quantitative indicators relating to the number of projects, where there were gaps the total number of cases has been reported based on the limited information available. Therefore, reported numbers of projects in this publication may be an underestimate or overestimate the actual numbers.

Further, for various indicators, this publication captures information based on the provisions of the laws, regulations, policies, and government publications associated with the PPP legal, regulatory, policy, and institutional frameworks in the country. This publication does not provide details on the existing status regarding the adoption or application of such PPP laws, regulations, and policies, and the existing challenges being faced in such applications.

2 Critical Macroeconomic and Infrastructure Sector Indicators for Indonesia

The various macroeconomic and infrastructure sector indicators for Indonesia are provided in Table A2.1.

Table A2.1: Macroeconomic and Infrastructure Sector Indicators for Indonesia

Parameter	Value	Unit of Measurement
Total population	266.912	million
Average annual population growth rate	1.143192688	%
Population density	139	Persons per km^2 of surface area
Urban population	50.24	% of total population
Surface area	1913.58	'000 km^2
Unemployment rate	5.34	%
Proportion of population below $1.90 PPP a day	4.639	%
Nominal GDP	1,119.151675	$ billion
	5.024714022	%
Annual growth rate of GDP (2019)	5	%
Annual growth rate of GDP (2020 forecast)	(1)	%
Annual growth rate of GDP (2021 forecast)	5	%
GDP at PPP per capita	12,440	$ at PPP
GDP at current market prices	1,016	$ billion
Gross fixed investment at current market prices	32.1	% of GDP
Per capita GNI, Atlas method	3,840	$
Inflation rate (2019)	3	%
Inflation rate (2020 forecast)	2	%
Inflation rate (2021 forecast)	3	%
Current account (2019)	(2.72)	% of GDP
External trade, goods, value of imports, CIF (2018)	188.56	$ billion
External trade, goods, value of exports, FOB (2018)	179.98	$ billion
CPIA quality of budgetary and financial management rating	UA	1=lowest to 6=highest
CPI % change over 2018	3.03	% of CPI in 2018
Real effective exchange rate	UA	
Investment in energy with private participation	8,068.8	Current $ million
Investment in transport with private participation	462	Current $ million
Investment in water and sanitation with private participation	140	Current $ million
LPI rank	46	Number
LPI score	3.15	Number

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Parameter	Value	Unit of Measurement
Customs rank	62	Number
Customs score	2.67	Number
Infrastructure rank	54	Number
Infrastructure score	2.89	Number
International shipments rank	42	Number
International shipments score	3.23	Number
Logistics competence rank	44	Number
Logistics competence score	3.1	Number
Tracking and tracing rank	39	Number
Tracking and tracing score	3.3	Number
Timeliness rank	41	Number
Timeliness score	3.67	Number
Structure of Output (% of GDP at current producer, basic prices)		
Agriculture	13.35	%
Industry	41.41	%
Services	45.24	%
Consumer price index (national)	3.20	% annual change
Producer price index	UA	% annual change
Wholesale price index (national)	5.45	% annual change
Retail price index	UA	% annual change
Exchange rates (end of period)	14,481.00	Rp per $1
ADF Portfolio		
Total number of loans	2.00	Number
1. Sovereign	2.00	Number
2. Nonsovereign	UA	Number
Net loan amount	56.80	$ million, cumulative
1. Sovereign	56.80	$ million, cumulative
2. Nonsovereign	UA	$ million, cumulative
Disbursed amount	7.60	$ million, cumulative
1. Sovereign	7.60	$ million, cumulative
2. Nonsovereign	UA	$ million, cumulative
Net FDI inflows	2.20	% of GDP
Sovereign debt risk rating	45.00	Letter rating
Central government debt	31.40	% of GDP
CPIA quality of budgetary and financial management rating		1=lowest to 6=highest

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Parameter	Value	Unit of Measurement
Parameters for Ease of Doing Business		
Ease of doing business (rank)	73.00	Number
Starting a business (rank)	140.00	Number
Dealing with construction permits (rank)	110.00	Number
Getting electricity (rank)	33.00	Number
Registering property (rank)	106.00	Number
Getting credit (rank)	48.00	Number
Protecting minority investors (rank)	37.00	Number
Paying taxes (rank)	81.00	Number
Trading across borders (rank)	116.00	Number
Enforcing contracts (rank)	139.00	Number
Resolving insolvency (rank)	38.00	Number
Corruption and Sustainable Development Index		
Corruption Perceptions Index rank (out of 180)	85	Number
Corruption Perceptions Index score (out of 100)	40	Number
Sustainable Development Index rank	101.00	Number
Sustainable Development Index score	65.30	Number
Cumulative Lending, Grant, and Technical Assistance Commitments		
Number of projects	944.00	Number
Total lending	37,595.23	$ million
EIU Infrascope Index Score 2019, Asia–Pacific		
Public–private partnership overall score	59/100 11/21	Score Rank
Public–private partnership regulations	78/100 3/21	Score Rank
Public–private partnership institutions	53/100 15/21	Score Rank
Public–private partnership market maturity	42/100 18/21	Score Rank
Public–private partnership financing	58/100 6/21	Score Rank
Investment and business climate	72/100 7/21	Score Rank

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Parameter	Value	Unit of Measurement
Global Competitiveness Index: 2019		
Global Competitiveness Index: Component of Infrastructure	67.7/100 72/141	Score Rank

ADF =Asian Development Fund; CIF = cost, insurance, freight; CPI = consumer price index; CPIA = Country Policy and Institutional Assessment; EIU = Economist Intelligence Unit, FDI = foreign direct investment; FOB = free on board; GNI = gross national income; GNP = gross national product; km^2 = square kilometers; LPI = Logistics Performance Index; PPP = purchasing power parity; Rp = Indonesian rupiah; UA = Unavailable

Note: Parentheses around numbers indicate negative values.

Source: ADB. 2020. *Basic 2020 Statistics*. Manila. https://www.adb.org/sites/default/files/publication/601126/basic-statistics-2020.pdf.; ADB Data Library. GDP Growth in Asia and the Pacific, Asian Development Outlook (ADO). https://data.adb.org/dataset/gdp-growth-asia-and-pacific-asian-development-outlook; ADB Data Library. Inflation Rate in Asia and the Pacific, Asian Development Outlook (ADO). https://data.adb.org/dataset/inflation-rate-asia-and-pacific-asian-development-outlook; International Monetary Fund (IMF). External Trade in Billions of US Dollars. https://data.imf.org/?sk=4c514d48-b6ba-49ed-8ab9-52b0c1a0179b&sId=1502896793454; World Bank. International LPI. https://lpi.worldbank.org/international/global?sort=asc&order=LPI%20Score#datatable; ADB. 2019. *Key Indicators for Asia and the Pacific 2019* (50th edition). Manila. https://www.adb.org/sites/default/files/publication/521981/ki2019.pdf; ADB. 2016. *Country Partnership Strategy: Indonesia, 2016–2019—Towards a Higher, More Inclusive and Sustainable Growth Path.* Manila. https://www.adb.org/sites/default/files/institutional-document/202126/cps-ino-2016-2019.pdf; The Economist Intelligence Unit. Measuring the Enabling Environment for Public–Private Partnerships in Infrastructure. https://infrascope.eiu.com/; World Bank. Ease of Doing Business Rankings. https://www.doingbusiness.org/en/rankings; Transparency International. Our Work in: Indonesia. https://www.transparency.org/en/countries/indonesia; ADB Data Library. Cumulative Lending, Grant, and Technical Assistance Commitments. https://data.adb.org/dataset/cumulative-lending-grant-and-technical-assistance-commitments; The Economist Intelligence Unit. 2018. *Evaluating the Environment for Public–Private Partnerships in Asia: The 2018 Infrascope*. London. https://infrascope.eiu.com/wp-content/uploads/2019/02/EIU_Asia-Infrascope-2018_final-report.pdf; K. Schwab, ed. 2019. *The Global Competitiveness Report 2019*. Geneva: World Economic Forum. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf; Sources: PPP Knowledge Lab. Indonesia. https://pppknowledgelab.org/countries/indonesia (accessed 24 August 2020); The Economist Intelligence Unit, Measuring the Enabling Environment; World Bank. Private Participation in Infrastructure (PPI) database. Country Snapshots: Indonesia. https://ppi.worldbank.org/en/snapshots/country/indonesia (accessed 24 August 2020).

3 World Bank's Ease of Doing Business Parameters for Indonesia

A snapshot of Indonesia's parameters, scores, and rankings in the World Bank Group's publication *Doing Business 2020* are shown just below in Table A3.1, Table A3.2, Figure 64 and Figure 65.

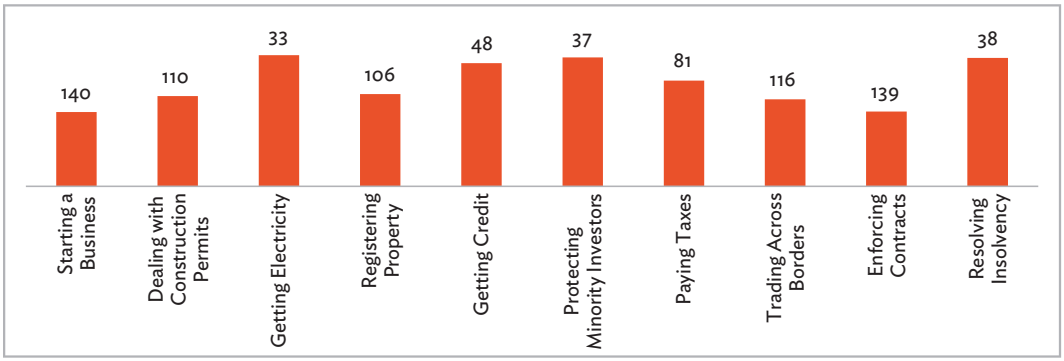
Table A3.1: Basic Information on Ease of Doing Business in Indonesia, 2020

Ease of Doing Business in Indonesia			**Doing Business Rank – 73**	**Doing Business Score – 9.6**
	Region	East Asia and the Pacific		
	Income category	Lower middle income		
	Population	267,663,435[a]		
	City covered	Jakarta, Surabaya		

Sources: Worldometer. Indonesia Population. https://www.worldometers.info/world-population/indonesia-population/#:~:text=The%20current%20population%20of%20Indonesia,year%20according%20to%20UN%20data.

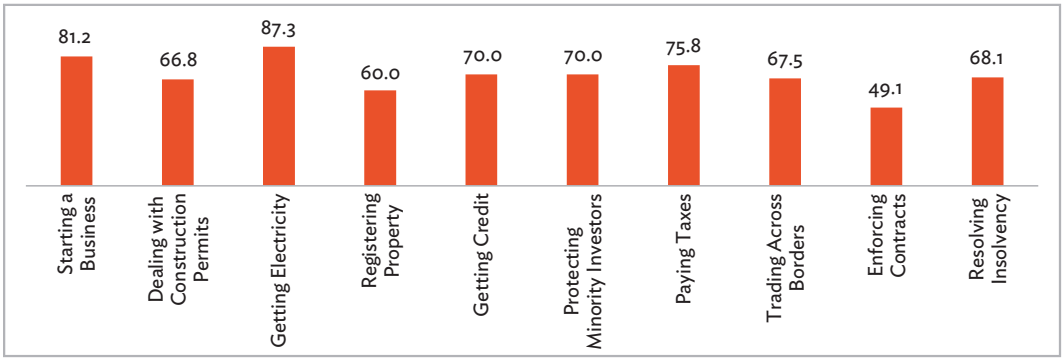
World Bank Group. 2020. *Doing Business 2020: Economic Profile; Indonesia*. Washington, DC. https://www.doingbusiness.org/content/dam/doingBusiness/country/i/indonesia/IDN.pdf.

Figure 64: Indonesia's Rankings for Doing Business Topics, 2020



Source: World Bank Group. 2020. *Doing Business 2020: Economic Profile; Indonesia.* Washington, DC. https://www.doingbusiness.org/content/dam/doingBusiness/country/i/indonesia/IDN.pdf.

Figure 65: Indonesia's Scores on Doing Business Topics, 2020



Source: World Bank Group. 2020. *Doing Business 2020: Economic Profile; Indonesia.* Washington, DC. https://www.doingbusiness.org/content/dam/doingBusiness/country/i/indonesia/IDN.pdf.

Table A3.2: A More In-Depth View of Indonesia's Scores for Ease-of-Doing-Business Topics, 2020

Starting a Business (rank)	**140**	**Dealing with Construction Permits (rank)**	**110**	**Getting Electricity (rank)**	**33**	**Registering Property (rank)**	**106**
Score of starting a business (0–100)	81.2	Score of dealing with construction permits (0–100)	66.8	Score of getting electricity (0–100)	87.3	Score of registering property (0–100)	60.0
Procedures (number)	11	Procedures (number)	18	Procedures (number)	4	Procedures (number)	6
Time (days)	13	Time (days)	200	Time (days)	32	Time (days)	31
Cost (number)	5.7	Cost (% of warehouse value)	4.5	Cost (% of income per capita)	233.8	Cost (% of property value)	8.3
Paid-in minimum capital (% of income per capita)	0.0	Building quality control index (0–15)	13.8	Reliability of supply and transparency of tariff index (0–8)	6.0	Quality of the land administration index (0–30)	15.5

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Getting Credit (rank)	48	Protecting Minority Investors (rank)	37	Paying Taxes (rank)	81
Score of getting credit (0–100)	70.0	Score of protecting minority investors (0–100)	70	Score of paying taxes (0–100)	75.8
Strength of legal rights index (0–12)	6	Extent of disclosure index (0–10)	10	Payments (number per year)	26
Depth of credit information index (0–8)	8	Extent of director liability index (0–10)	5	Time (hours per year)	191
Credit registry coverage (% of adults)	30.9	Ease of shareholder suits index (0–10)	2	Total tax and contribution rate (% of profit)	30.1
Credit bureau coverage (% of adults)	40.4	Extent of shareholder rights index (0–6)	5	Post filing index (0–100)	68.8
		Extent of ownership and control index (0–7)	6		
		Extent of corporate transparency index (0–7)	7		

Trading across Borders (rank)	116	Enforcing Contracts (rank)	139	Resolving Insolvency (rank)	38
Score of trading across borders (0–100)	67.5	Score of enforcing contracts (0–100)	49.1	Score of resolving insolvency (0–100)	68.1
Time to export		Time (days)	403	Recovery rate (cents on the dollar)	65.5
Documentary compliance (hours)	61	Cost (% of claim value)	70.3	Time (years)	1.1
Border compliance (hours)	56	Quality of judicial processes index (0–18)	8.9	Cost (% of estate)	21.6
Cost to export				Outcome (0 as piecemeal sale and 1 as going concern)	1
Documentary compliance ($)	139			Strength of insolvency framework index (0-16)	10.5
Border compliance ($)	211				
Time to export					
Documentary compliance (hours)	106				
Border compliance (hours)	99				
Cost to export					
Documentary compliance ($)	164				
Border compliance ($)	383				

Source: World Bank Group. 2020. *Doing Business 2020: Economic Profile; Indonesia*. Washington, DC. https://www.doingbusiness.org/content/dam/doingBusiness/country/i/indonesia/IDN.pdf.

4 Assessment of the Public Financial Management System in Indonesia

Based on the latest assessment of the Public Financial Management System (PFMS) in Indonesia,[54] the Public Expenditure and Financial Accountability (PEFA) framework report, which is published periodically, gave Indonesia an overall rating of B for one of the performance indicators—transfers from the national government to subnational governments—under the pillar of "Transparency of Public Finances." The rating scale consists of four points, ranging from A (best) to D (worst).[55] Table A4.1 provides details on Indonesia's PEFA overall rating for that performance indicator, along with the ratings for the two dimensions under the indicator. Table A4.2 presents P scores for this performance indicator and for two relevant parameters.

Table A4.1: Ratings under the Public Expenditure and Financial Accountability Framework, 2017

Subnational Parameter	Score	Justification for Score
System for allocating transfers	C	Of the central government's transfers to subnational governments, 73.9% are rule-based, transparent, and predictable in their calculations and in the use of underlying data.
Timeliness of information on transfers	A	In 2016, information on most of the transfers was uploaded to the website of the director general of fiscal balance right after the State Budget Law had been approved, on 26 October, providing the regions with two months to include relevant information in their budgets.
Transfers to subnational governments—overall rating	B	Most of the transfers to subnational governments are based on clearly defined set of rules and procedures. The timing of the information provided to the subnational governments allows 6 weeks before the deadline for budget approval by regional parliaments (31 December of prior year).

Source: World Bank. 2018. *Indonesia: Public Expenditure and Financial Accountability (PEFA) Assessment Report 2017*. Washington, DC and Jakarta, Indonesia. p. 43. https://www.pefa.org/sites/pefa/files/assessments/reports/ID-May18-PFMPR-Public-with-PEFA-Check.pdf.

Table A4.2: Assessments under the Public Expenditure and Financial Accountability Framework, 2017

Parameter	Value	Unit of Measurement
National government transfers of funds to subnational governments	5.7	% of GDP
Actual budgetary allocation to subnational governments from the national government	38.1	% of total expenditure
Deviation of actual against projected budgeted transfers to subnational governments	3.7	% of budgeted transfers

GDP = gross domestic product.

Source: World Bank. 2018. *Indonesia: Public Expenditure and Financial Accountability (PEFA) Assessment Report 2017*. Washington, DC and Jakarta, Indonesia. https://www.pefa.org/sites/pefa/files/assessments/reports/ID-May18-PFMPR-Public-with-PEFA-Check.pdf.

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Public–Private Partnership Monitor

Indonesia

This publication provides a snapshot of the overall public–private partnership (PPP) landscape in Indonesia. It includes more than 500 qualitative and quantitative indicators to profile the national PPP environment, the sector-specific PPP landscape (for eight identified infrastructure sectors), and the PPP landscape for local government projects. This downloadable guide also captures the critical macroeconomic and infrastructure sector indicators (including the Ease of Doing Business scores) from globally accepted sources. Through Presidential Regulation 38/2015, the cornerstone of the country's robust PPP enabling framework, Indonesia expects PPPs to continue playing a pivotal role to achieve its infrastructure investment target of $429 billion for 2020–2024 and mobilize 59% of this value from the private sector.

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