

REPUBLIC OF INDONESIA
MINISTRY OF NATIONAL DEVELOPMENT PLANNING/
NATIONAL DEVELOPMENT PLANNING AGENCY

NFRASTRUCTURE PROJECTS PLAN IN INDONESIA



PUBLIC PRIVATE PARTNERSHIP

INFRASTRUCTURE PROJECTS PLAN IN INDONESIA



FORFWORD

PPP FOR BETTER INFRASTRUCTURE

Indonesia as an emerging market has been well aware of infrastructure development as one of key essentials in accelerating the growth of economics and lessening the gap of economic inequality between the eastern and western parts of Indonesia. World Competitiveness Yearbook (WCY) 2022 states that the rank of Indonesia's infrastructure quality has increased, from rank 57th in 2021 to rank 52nd in 2022. This achievement means that the Government of Indonesia remains committed to strengthening infrastructure services.

The Government of Indonesia realizes the importance of private participation in accelerating infrastructure development in Indonesia, especially considering the government's limitation to provide funding for infrastructure needs. Under the current 2020-2024 National Medium-Term Development Plan (RPJMN), the government's main target is to reach the average GDP growth of 6% and allocate IDR 6,445 Trillion or about 6,2% of GDP for infrastructure spending. In contrast, the funding capacity of the government is only able to fund IDR 2,385 Trillion or about 37% of the total required investment. This funding gap forces the government to maximize innovative financing schemes by encouraging the participation of the private sector in infrastructure provision investment through the Public Private Partnership (PPP) scheme.

The Government of Indonesia strives to facilitate and support the Government Contracting Agency's (GCA) capacity as well as providing reliable information for the private sector as the potential investor. Aiming to give a better overview about the PPP projects, the Government issues PPP Book annually. The preparation of this PPP Book is inseparable from the close coordination with the Government Contracting Agency (PPP's Project Owner) as well as the PPP Joint Office of The Republic of Indonesia (the coordination forum of PPP implementation in Indonesia).

In PPP Book, the projects are organized based on their readiness level and categorized into two; the ready to offer and the under preparation projects. Moreover, PPP Book also provides information related to projects that are currently in the tender or signing process (Already Tendered) and the success story of PPP projects in Indonesia. This year, the total projects covered in PPP Book are 52 projects, with 50 categorized as under preparation projects and 2 categorized as ready to offer projects.

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1. Indonesia Country Profile

Indonesia, with a land area of 1,904,569 square kilometres, is the 14th largest country in the world, where it consists of 38 provinces. Indonesia's population — estimated of 277.2 million in 2023 makes it the world's fourth-most-populous country and the most populous in Southeast Asia. According to the World Bank, Indonesia's GDP per capita has steadily risen, from 4,362 USD in 2021 to 4,798 USD in 2022 (IMF, 2023). Indonesia is also a member of the G-20, as a representative from emerging market countries that give an economic impact to the world.

In order to achieve the medium scenario of GDP growth target and infrastructure stock target in 2020-2024 RPJMN, a total of IDR 6,445 Trillion is needed for infrastructure development or an average of 6.2 percent of the GDP. However, the government's ability to fund infrastructure development is only IDR 2,385 Trillion or 37% of the total needs (2020-2024 RPJMN). It requires an innovative effort to encourage the participation of the non resource envelope fund/private sectors to finance the remaining 63% of the infrastructure development needs.

By bridging the infrastructure gap, Indonesia can enhance connectivity, promote sustainable development, and improve the citizen overall well-being. The infrastructure gap also presents an opportunity for collaboration between the public and private sectors to create innovative solutions that address the country needs. As a developing nation, Indonesia has a tremendous opportunity to grow and thrive by investing in the infrastructure sector to meet the evolving needs of the population. To unlock its full potential, Indonesia need to prioritize infrastructure projects that enhance connectivity, create employment opportunities, and improve the overall quality of life such as transportation, healthcare, education, water & sanitation, energy and digital infrastructures.

Over the years, the investment climate for the private sector is getting better, as Indonesia has steadily increased its Ease of Doing Business (EoDB) Ranks by the World Bank. Indonesian EoDB's rank rose from 106 in 2016 to 73 in 2020. In 2022, Indonesia is the Top 13 Japan Investment Destination (FDI rating) and had a total of 45.6 Billion USD in Foreign Direct Investment (FDI) – a 44.2% increase from the previous years, amidst the highly volatile global economy through the pandemic. Moreover, Indonesia's Sovereign Credit Rating is rated by Moody's (Baa2/Stable Outlook) and S&P (BBB/Stable Outlook) in 2022, and also Fitch (BBB/Stable Outlook) in 2022.

Understanding the limitations of the government budget to boost Indonesia's Economic Transformation, the Government of Indonesia truly understand the importance of private sector participation in infrastructure provision. Hence, in order to give optimal public services while keeping close engagement with private entity, the Goals is offering the Public-Private Partnership (PPP) as an alternative financing scheme in developing infrastructure projects. This scheme is provided through the Presidential Regulation Number 38/2015 alongside its derivative regulations. Now, as the condition for PPP projects in Indonesia has matured and a steady pipeline of new projects has come throughout the years, new opportunities for investment arise alongside the projects.



2. Regulatory Frameworks

The Government has taken a series of major steps to improve the attractiveness and competitiveness of the Government's PPP program by refining the PPP policies and regulatory framework.. The regulations consist of:

- Regulatory Framework for PPP Scheme Guidelines
 - a. Presidential Regulation Number 38/2015 regarding Public Private Partnership on Infrastructure Provision contains general stipulation to support the implementation of national development in order to improve the national economy, the welfare of society and the competitiveness of Indonesia in a global context. This Presidential Regulation mandated to Bappenas, LKPP, MoF, MOHA to stipulate the technical regulation.
 - b. Minister of National Development Planning Number 4/2015 regarding operational guidelines for PPP on infrastructure provision as amended by Minister of National Development Planning Regulation Number 2/2020. The key points of this amendment are:
 - Simplification of studies preparation for both solicited and unsolicited projects;
 - · Adding more sectors of infrastructure as the sector-specific needs are growing;
 - Improving the role of PPP Joint Office.
 - c. Head of National Public Procurement Agency (LKPP) Regulation Number 19/2015 regarding guidelines for procurement of business entities on PPP schemes in infrastructure provision. This regulation applies for unsolicited project and preparation agencies.
 - d. National Public Procurement Agency (LKPP) Regulation Number 29/2018 regarding guidelines for procurement of business entities on solicited PPP infrastructure projects. The key point of this regulation is to make the guidelines more clear, especially regarding two stages bidding.
- 2) Regulatory Framework for Availability Payment Scheme on PPP Projects
 - a) Minister of Finance Regulation Number 260/2016 as an amendment of Minister of Finance Regulation Number 190/2015 regarding Availability Payment on PPP scheme in Infrastructure Provision.
 - b) Minister of Home Affair Regulation Number 96/2016 regarding Availability Payment using the local budget (APBD) on PPP scheme in Infrastructure Provision. Minister of Home Affair Regulation Circular letter number 120/3890/SJ regarding Explanation of the Implementation of the Local Government Cooperation with Third Parties.
- 3) Regulatory Framework for Government Guarantee on PPP Projects
 - a) Presidential Regulation Number 78/2010 regarding Government Guarantees on PPP Infrastructure Projects.
 - b) Minister of Finance Regulation Number 8/2016 as an amendment of Minister of Finance Regulation Number 260/2010 regarding Guidelines on a Government Guarantee.
 - c) Minister of Finance Regulation Number 183/2018 regarding Operational Guidelines of Management Reserve Fund Guarantee for the Government Obligation Guarantee Implementation.
- 4) Regulatory Framework for Government Support on PPP Projects
 - a) Minister of Finance Regulation Number 170/2018 as an amendment of Minister of Finance Regulation Number 223/2012 regarding Viability Gap Fund
 - Minister of Finance Regulation Number 170/2015 as an amendment of Minister of Finance Regulation Number 143/2013 regarding Viability Gap Fund
 - c) Minister of Finance Regulation Number 180/2020 regarding Project Development Facility
- 5) Other related regulation
 - a) Government Regulation Number 27/2014 regarding the Management of National/Regional Asset as amended by Government Regulation Number 28/2020 regarding the Management of National/Regional Asset
 - b) Sectoral Regulations.

Presidential Regulation No 38/2015 regarding **Regulation on Government** Other Related Public- Private Partnership on Infrastructure **REGULATION ON OPERATIONAL GUIDELINE** Presidential Regulation Number Government Minister of National Development Planning No.2/2020 as an 78/2010 regarding government Regulation Number 27 amendment of Minister of National Development Planning guarantee on PPP infrastructure / 2014 regarding No 4/2015 regarding Operational Guideline for PPP on Infrastructure Provision project management of Head of National Public Procurement Agency (LKPP) Minister of Finance Regulation national / regional Regulation Number 19/2015 regarding guideline for Number 8/2016 as an amendment of asset procurement of business entity on PPP scheme in Minister of Finance Regulation infrastructure provision Sectoral Regulations National Public Procurement Agency (LKPP) Regulation Number 260/2010 regarding Number 29/2018 regarding guideline for procurement of guideline on a government business entity on solicited PPP infrastructure project guarantee Minister of Finance Regulation REGULATION ON VIABILITY GAP FUND Minister of Finance Regulation Number 170/2018 as an Number 30/2012 regarding amendment of Minister of Finance Regulation Number contingency liability fund 223/2012 regarding Viability Gap Funding REGULATION ON AVAILABILITY PAYMENT · Minister of Finance Regulation Number 260/2016 as and amendment of Minister of Finance Regulation Number 190/2015 regarding Availability Payment on PPP scheme in Infrastructure Provision Minister of Home Affair Regulation Number 96 /2016 regarding Availability Payment using the local budget (APBD) on PPP scheme in Infrastructure Provision

Figure 1: The Evolving Cross-sector PPP Regulatory Frameworks in Indonesia

3. PPP Stage

Based on Presidential Regulation Number 38/2015, there are two PPP project proposal schemes, which are Solicited and Unsolicited. The stages comparison between the two schemes is shown below. Solicited project is initiated by the Government, while the Unsolicited project is initiated by the private sector.

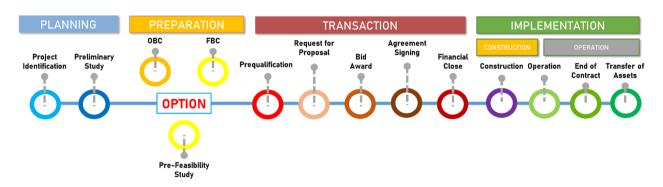


Figure 2: The Project Pipeline for Solicited Proposals

According to Minister of National Development Planning Regulation Number 2/2020, for solicited proposals, the PPP Project Pipeline consists of four phases, namely Planning, Preparation, Transaction, and Implementation.

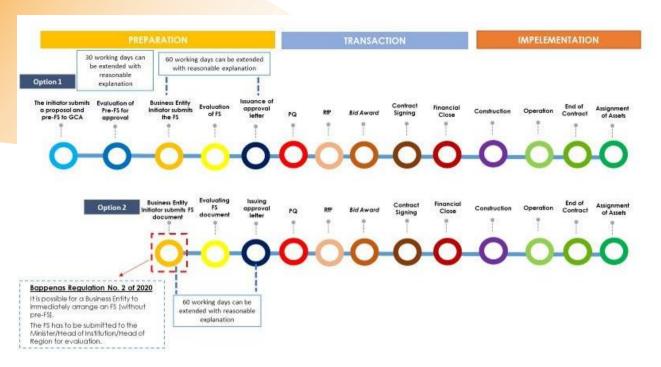


Figure 3: The Project Pipeline for Unsolicited Proposals

The unsolicited PPP proposal is initiated by the private sector or the project proponent. There are 3 stages of unsolicited project: Preparation, Transaction, and Implementation. The preparation is being conducted by the private sector as the initiator.

3.1 Planning

In solicited proses the planning phase consists of Project Identification and Preliminary Study. The first step is used to choose a viable PPP project from a list of projects. Then, during the second step, the project will go through a series of qualitative studies to determine whether the project is suitable for a PPP scheme. This phase is estimated to take 1 to 2 months. During this phase, Public Consultation is required to be done to inform the impacted parties on the planned PPP Project. More activities in planning phase are as follows:

1) PPP budget planning

The Minister/Head of Institution/Head of Regional Government/ Director of State Owned Enterprise (SOE)/Director of Regional Owned Enterprise set up a budget for PPP that includes all stages from planning, preparation, transaction and implementation. This step is crucial to ensure the continuity of the project.

2) PPP identification and determination

Project identification, as the name implies, refers to the activities of finding a suitable infrastructure project to be carried out using a PPP scheme. There are 21 sectors that are eligible to be provided using the PPP scheme. PPP projects can be identified in three ways as follows:

- a) Proposed by Minister/Head of Institution/Head of Regional Government/Director of State-Owned Enterprise (SOE)/Director of Regional-Owned Enterprise (ROE), colloquially named Government Contracting Agency (GCA).
- b) Proposed by the Ministry of National Development Planning/ National Development Planning Agency based on the National Development Priority Program.
- Proposed to suitable GCA by the business entity itself, known as unsolicited projects.

In solicited PPP projects, determining whether the project is suitable for PPP or not, must be done using a preliminary study. A preliminary study is an initial study conducted by the GCA to provide descriptions of the requirements necessary for the infrastructure provision and its benefits if it is delivered under cooperation with the business entity through the PPP scheme. Furthermore, the Preliminary Study should consist of:

- a) Need analysis
- b) Compliance criteria
- c) Value for money analysis
- d) Analysis of potential revenue and project funding scheme
- e) Recommendation and follow-up plan
- 3) PPP planning phase budget disbursement

The GCA must set up and eventually disburse the budget for the planning phase, at least for preparation of Preliminary Study and conducting Public Consultation.

4) Public consultation

Public consultation on the preparation stage will discuss the planned projects with related stakeholders. The goal of the public consultation is to gather inputs and responses from stakeholders regarding the projects.

5) PPP screening

After completing the preliminary study including the public consultation, the GCA will decide whether the planned project is suitable to be continued using PPP or other schemes. If the GCA decide that the Project will be done through PPP scheme, the GCA could propose the project to be consider listed under PPP Book by sending a letter attached with its required documentation to the Minister of National Development Planning

6) Compiling the PPP Book

The Ministry of National Development Planning after receiving the project from GCAs will then check its readiness and compile the projects. This document is issued annually.

7) PPP Categorization

The proposed project, will be categorized into two categories: under preparation projects and ready to offer projects, according to its readiness and completion level.

3.2 Preparation

In solicited proposal, the project will undergo a series of quantitative studies to see the viability of the PPP projects, in terms of financial value, economic value, risk analysis and mitigation, et cetera. In this phase, private sectors are invited to give input in Market Sounding. It is to be noted that in special cases, Outline Business Case (OBC) and Final Business Case (FBC) can be combined into one document, if the project is considered as a priority project and/or national strategic project or if there are similar projects with proven high demand on the market. In general, it is estimated to take 8 to 10 months for a project to finish the preparation phase.

1) Pre-Feasibility Study

Pre-Feasibility Study in solicited PPP Projects can be divided into 2 (two) documents: OBC and FBC, where the FBC is the improvement of the OBC with more detailed data and analysis. Although in special cases, both can be combined into one document, such as if the project is considered a priority project and/or national strategic project or if there are similar projects with proven high demand on the market. The OBC/FBC document must include at least:

- a) Legal and institutional analysis;
- b) Technical analysis;
- c) Economic and commercial analysis;
- d) Environmental and social analysis;
- e) Cooperation form and structure in infrastructure provision analysis;
- f) Risk management analysis;
- g) Government Support and/or Government Guarantee analysis; and
- h) Outstanding issues.

2) Public Consultation

The purpose of Public Consultation is to review the compliance of the social standards. Moreover, the aim of Public Consultation is to obtain inputs regarding public needs related to the PPP project and ensure the readiness of the project.

3) Market Sounding

Market Sounding is intended to obtain inputs and responses from the PPP markets (business entities/agencies/institutions/ national or international organizations).

Unsolicited PPP starts from the time the project proponent proposes the project to GCA by submitting Letter of Intent (LoI) and Pre-Feasibility Study or Feasibility Study. The Pre-Feasibility Study and Feasibility Study in unsolicited proposal consist 8 kind of analysis, which are the same as the solicited's OBC/FBC document (from legal to outstanding issues). After receiving the Feasibility Study, the GCA then must do all internal assessments and decide whether to approve the project or not. When the GCA approves the project after assessing and evaluating the proposal, it must issue an Approval Letter.

The type of Approval Letter will depend on the level of Feasibility Study given. If the project proponent submit a Pre-Feasibility Study, the government will issue a Pre-FS Approval Letter and give rights to the project proponent to prepare the Feasibility Study. If the project proponent submit a Feasibility Study, the government will issue a FS Approval Letter and announce the proponent as Project Initiator.

The Project Initiator may propose the incentives or benefits as compensation for their work on preparing the project. The choices of incentives or benefits to the Project Initiator are as follows:

a) Right to Match

If another bidder has a better proposal wins the tender process after the evaluation, Project Initiator may, at their own consideration, match their proposal.

b) Additional Point on Procurement Score

The Project Initiator automatically gains an additional score of 10% during the proposal evaluation process.

c) Sold the initiatives to the GCA

GCA can purchase the intellectual property of the Feasibility Study at an agreed price from the Project Initiator. The Feasibility Study document is then owned by the GCA. Then, Project Initiator can decide whether to participate without any added incentives or not participate in the tender process at all.

While the Pre-FS/FS document is prepared by the project proponent (business entity), GCA still need to conduct Public Consultation on the preparation stage to gather inputs and responses from stakeholders regarding the projects. On the process of evaluating Pre-FS/FS, GCA could also conduct a Market Confirmation to make sure the project is accepted and could attract the market.

Same as the solicited project, the GCA could propose the project to be consider listed under PPP Book by sending a letter attached with its required documentation to the Minister of National Development Planning to be included on the PPP Book whether it is in under preparation or ready to offer catgory, according to its readiness and completion level.

3.3 Transaction

Transaction phase, both in solicited and unsolicited proposal, facilitates the project through a transaction to find the suitable business entity, which include Market Consultation, Prequalification, Request for Proposal, Bid Award, PPP Agreement Signing, and then Financial Close. It is estimated to take 12 months to finish the transaction phase.

1) Market Consultation

Market consultation can be done to ensure the willingness of the prospective bidders and to gather inputs, considerations, and responses regarding the PPP Project. This activity can be done by one-on-one meetings with interested parties or formal project promotional events.

2) Project Location Determination

GCA must determine and set the location of the project before the procument process. Land acquisition is one of the responsibilities of the GCA. The GCA must consult with any related institution to ensure that the land acquisition and the ensuing relocation (if any) is compliant with the regulation. GCA must also ensure that the project has obtained any applicable environmental permits and licenses.

3) SPC Procurement Process

The procurement process consists of pre-qualification of prospective participants, request for proposals, and evaluation. After evaluating the bidding proposals, the GCA will then determine the winning bidder. Before the winning bidder is awarded, usually the other bidders are given a chance to object to the result. Eventually, the GCA will release a letter of award if there is no objection from other bidders or the objection is considered invalid.

4) Agreement Signing

After the letter of award is issued, the winning bidder must establish a Special Purpose Company (SPC) as legal entity to sign the PPP agreement. If there is some form of government guarantee, SPC must also sign the guarantee agreement with PT Penjaminan Infrastruktur Indonesia (PT PII) while the GCA signs a regress agreement with PT PII.

5) Financial Close

After signing the agreement, the SPC should be able to secure the financing of the project. This must be obtained no longer than 12 months after signing the PPP Agreement and could be extended from time to time if its failure to obtain financing is not caused by negligence of the Implementing Business Entity. Every extension given for financial close should be no longer than six months. Financial close could also be done in stages according to the project cycle and the agreement between SPC and GCA.

3.4 Implementation

The implementation stage consists of 2 (two) activities in both solicited and unsolicited, that is:

1) Preparation of PPP implementation monitoring

To prepare for the implementation, GCA must establish the monitoring team, prepare and issue guidelines on PPP implementation monitoring, hand over all project documentation to the monitoring team, and oversee the progress of financial close from the SPC.

2) PPP implementation monitoring

The monitoring will commence from the construction phase, operational phase, until the handover of the asset after the cooperation period is finished.

4. PPP Joint Office

To expedite the implementation of PPP projects in Indonesia, President Joko Widodo issued directions during the 2017 PPP Book launching, stating that coordination for PPP projects would be conducted through the Indonesia PPP Joint Office. The establishment of the Indonesia PPP Joint Office aims to serve as a coordination forum for all stakeholders involved in PPP projects.

The primary purpose of the Indonesia PPP Joint Office is to facilitate coordination among various stakeholders engaged in PPP projects. It provides a platform for effective communication, collaboration, and decision-making related to PPP initiatives. By centralizing coordination efforts, the Indonesia PPP Joint Office aims to streamline processes, enhance efficiency, and promote a cohesive approach to PPP project implementation. Additionally, the Indonesia PPP Joint Office offers facilitation and capacity-building support throughout the project lifecycle. It provides assistance and guidance to stakeholders, starting from the planning stage through to the operation stage of PPP projects. This support helps ensure that projects are well-planned, properly implemented, and effectively managed.

To strengthen the institutional coordination among PPP stakeholders, a Memorandum of Understanding on the Synergy of Ministries and Institutions in the Implementation of Infrastructure Provision was signed by the seven members of the Indonesia PPP Joint Office on September 18th, 2020. This agreement solidifies the collaborative efforts between the government, regional government, and business entities in implementing infrastructure projects through the PPP scheme. The establishment of the Indonesia PPP Joint Office and the signed Memorandum of Understanding highlight the commitment of the Indonesian government to promote effective coordination, streamline processes, and enhance the implementation of PPP projects for the development of infrastructure in the country.

The functions of the PPP Joint Office are:

- a. Become a coordination forum for PPP stakeholders;
- b. A front office for the Government to serve business entities in obtaining information and knowledge related to PPP schemes;
- c. Give recommendation for PPP project implementation;
- d. To propose recommendation to related parties in harmonizing PPP policies;
- e. To monitor the government's planning and budgeting process in accommodating PPP projects;
- f. Synergize in providing Government support and facilities for project in a sustainable and integrated manner;
- g. Recommends required guidelines for PPP implementation to the PPP Joint Office member based on their duties, function and authorities;
- h. Implement effective management and communication between PPP stakeholders including exchange of data and information to strengthen data integration; and
- i. Become an integrated PPP information center that is accessible by business entities and all PPP stakeholders.

The members of the PPP Joint Office are:

- a. Coordinating Ministry of Economic Affairs.
- b. Coordinating Ministry of Maritime and Investment Affairs.
- c. Ministry of Finance.
- d. Ministry of Home Affairs.
- e. The Ministry of National Development Planning/National Development Planning Agency (Bappenas).
- f. Ministry of Investment/Indonesia's Investment Coordinating Board (BKPM).
- g. National Public Procurement Agency (LKPP)

Indonesia Infrastructure Guarantee Fund (IIGF/PT. PII) as the Indonesian Guarantee Agency is actively involved in monitoring the implementation of the PPP Projects in Indonesia. Besides that, the PPP Joint Office Members can also involve other parties under their authority, such as the Ministry of Agrarian Affairs and Spatial Planning/National Land Agency under the Coordinating Ministry for Economic Affairs and PT SMI, and/or LMAN under the Ministry of Finance. In several conditions, The PPP Joint Office members invites the other related parties in the coordinating meetings (high level and technical meeting).

5. Option on Investment Return for PPP Project

According to Minister of National Development Planning/Head of National Development Planning Agency Regulation Number 4/2015 as amended by Minister of National Development Planning/Head of National Development Planning Agency Regulation Number 2/2020, there are 3 (three) options for the return of investment method, namely:

- User charge payment in the form of Tariff
 The Special Purpose Company (SPC)'s income is directly paid through user charge.
- 2) Availability Payment

The SPC will receive payment from the government based on the agreed amount which linked to the SPC's accomplishment of the level of service establish in PPP contract; and

3) Payment In other forms, in accordance with the laws

In PPP projects, the option on investment return refers to the mechanism or arrangement that allows the private sector participant (usually the Special Purpose Vehicle or SPV) to receive a return on their investment in the project.



Figure 4: User Charge Scheme

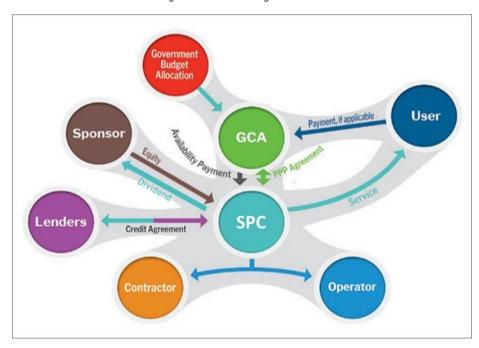


Figure 5: Availability Payment Scheme

6. PPP Project Selection Criteria

The PPP Book is a list of Public-Private Partnership projects planned in Indonesia. The list consists of two categories:
(i) Under Preparation Projects; and (ii) Ready to Offer Project.

In order to have a project registered in the PPP Book, the Minister, Head of Institution, or Head of Local Government

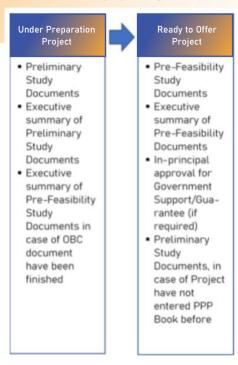


Figure 6: PPP's Proposal Supporting

is required to submit a project proposal to the Ministry of National Development Planning/Bappenas. Along with the proposal, they must provide a statement identifying the specific Ministry/Institution or Local Government working unit that will be responsible for the planning, preparation, and transaction of the proposed PPP project. The project proposal should be accompanied by supporting documentation, which may vary depending on the stage of planning. The specific documentation required at each planning stage can be found in Figure 6.

The projects inside the PPP Book 2023 has been develop in compliance with Minister of National Development Planning/ National Development Planning Agency Regulation Number 4/2015 as amended by Minister of National Development Planning/ National Development Planning Agency Regulation Number 2/2020, which governs the procedures for the implementation of PPP projects and registration of projects in the PPP Book respectively. The criteria in this regulation have been designed to ensure that all projects are appropriately analysed and help evaluate the project's feasibility, financial viability, technical aspects, environmental impact, and other relevant considerations.

The government recognizes the importance of providing bidders with sufficient information about the technical requirements of PPP

projects. By doing so, it enables potential bidders to better assess the project's needs and requirements and facilitates their ability to form the appropriate consortium partnerships. This, in turn, increases the likelihood of active participation in the project.

For each of the planning categories of the PPP Book, the following is a summary of assessment criteria for projects to be included, along with requirements associated with environmental assessment, land acquisition and resettlement, government support, and the government guarantee.

1) Under Preparation Project*

Under Preparation Project Eligibity Criteria

- Compliance with National/Regional Mid-Term Development Plan and Strategic Plan of infrastructure sector;
- Suitability of the project location which will be cooperated with Spatial Plan;
- Relation between inter-sector of Infrastructure and inter-region; and
- Has prepared the Preliminary Study.

^{*)} unsolicited project could be categorized as under preparation project if GCA has issued Pre-FS approval letter containing: Potential Initiator exclusive rights for a certain period of time to complete PPP Pre-Feasibility Stud become Feasibility Study, to obey procedures for unsolicited PPPs in accordance with General Guidelines and proposing compensation form.

2) Ready to Offer Project**

Ready to Offer Project Eligibity Criteria

- Has obtained certainty regarding PPP readiness, technical compliance, market interest, and the option of PPP form;
- Has completed environmental impact assessment in accordance with applicable laws and regulations;
- Has prepared detailed draft of output specification;
- Has prepared draft of SPC investment return;
- Has conducted financial model analysis, allocation and risk mitigation and also granting of Government Support and/or Government Guarantee mechanism, if needed;
- Has prepared a draft of SPC procurement plan considering:
 - Market potential and interest of Business Entities on the project;
 - Feasibility of planning and schedule of tender process; and
 - Readiness of the Procurement Committee.

3) Already Tendered Project

Already Tendered Project Eligibility Criteria

- · Has issued the Pre-Qualification notice;
- Projects that are in Pre-Qualification, tender, bid award and agreement signing stage are considered as already tendered projects.
- 4) Success Story Project

Success Story Project Eligibility Criteria

- Has obtain Financial Close;
- Projects that are in the construction and operation stage are considered as success story projects.
- 5) Important notes related to the Viability Gap Fund and Government Guarantee during the Procurement Process

Activities Related to Viability Gap Fund

- During preparation stage, the preparation document should identified if there is a need for Viability Gap Fund or other forms of Government Support;
- Before Pre-Qualification stage, the GCA shall file a request for Viability Gap Fund, in accordance with the laws and regulation;
- During bid stage, the Minister of Finance shall issue in-principle approval letter on VGF support;
- Once a tender winner has been selected, the GCA must submit the tender result to the Minister of Finance as the basis for the Minister of Finance to issue the final decision on VGF support

Activities Related to Government Guarantee

 Before the project bidders submit their proposals, the GCA must ensure that Guarantor has issued inprincipal approval, in the form of a Letter of Intent based on the result of Guarantor's evaluation

^{**)} unsolicited project could be categorized as ready to offer project if GCA has issued the final Approval Letter which contains: Feasibility Study approval, stipulation of PPP proposal as Unsolicited PPP, stipulation of Potential Initiator as Business Entities Initiator, stipulation of compensation form and SPC procurement prequalification eligibility.

6) Unsolicited Project

Unsolicited Project Eligibility Criteria

- Technically integrated with national/regional development plan and/or sectoral master plan;
- Economically and financially feasible;
- The project proponent has adequate financial capabilities to finance the project.

7. PPP Project Evaluation

7.1 PPP Books From 2009 to 2023

The following figure depicts the evolution of PPP projects throughout the successive PPP Books since 2009.

During 2023, line ministries and local governments submitted proposals for new infrastructure projects to BAPPENAS. In compliance with the Minister of National Development Planning/Head of BAPPENAS Regulation 4/2015 as amended by the Minister of National Development Planning/Head of BAPPENAS Regulation 2/2020, BAPPENAS reviewed and screened these proposals. Based on this review and screening process, 52 proposals were qualified to be listed in the PPP Book 2023. These projects were categorized as Ready to Offer and Under Preparation Projects, as per the regulations. In addition to these categories, there are also Already Tendered projects and Success Story projects.



Figure 7: Summary of PPP Book Projects from 2009 to 2023

7.2 PPP Book 2022 Evaluation as an Input to PPP Book 2023

Out of the 57 projects categorized as Under Preparation and Ready to Offer in the 2022 edition, Figure 8 below summarizes the evaluation process results since the publishing of the previous edition of the PPP Book. In this edition, 39 projects are carried on, while others have progressed to the next stage of the PPP scheme or been dropped due to various reasons.

The carried projects are:

- 1. Semanan Balaraja Toll Road (unsolicited)
- 2. Cikunir-Karawaci Inner City Elevated Toll Road (unsolicited)
- 3. Development of Singkawang Airport
- 4. Makassar-Maros-Sungguminasa-Takalar Toll Road
- 5. Development of Merangin Dam
- 6. Development of Kamijoro Regional Water Supply System

- 7. Development of Jatigede Regional Water Supply System
- 8. Development of Waste to Energy Facility in South Tangerang
- 9. Semarang Harbour Toll Road Integrated with Water Resource Control System (Unsolicited)
- 10. Piyungan Waste Treatment
- 11. Bina Harapan Cisaranten Housing
- 12. Integrated Hazardous and Specific Waste Management Facility in Sumatera
- 13. Sei Mangkei Public Housing
- 14. Development of Baubau Port
- 15. Batam-Bintan Bridge
- 16. Karawang Spuur Public Housing
- 17. Operational and Maintenance (OM) Surabaya-Madura (Suramadu) Bridge Bundling with Bandara Juanda-Tanjung Perak Toll Road (Surabaya Eastern Ring Road/SERR)
- 18. Malang-Kepanjen Toll Road (Unsolicited)
- 19. Ir. H. Djuanda Water Supply/Jatiluhur II (Unsolicited)
- 20. Natural Gas Distribution Network for Batam City Households
- 21. Natural Gas Distribution Network for Palembang City Households
- 22. Cilacap-Yogyakarta Toll Road
- 23. Demak-Tuban Toll Road
- 24. Ngawi-Bojonegoro-Babat Toll Road
- 25. Development of Bodri Dam in Kendal Regency
- 26. Betan Subing Type A Bus Terminal Development
- 27. Purabaya Type A Bus Terminal Development
- 28. Bandung Metropolitan Urban Railway
- 29. Construction of Palapa Ring Integration
- 30. Development of Sinumbra Regional Water Supply System (Unsolicited)
- 31. Transit Oriented Development (TOD) Poris Plawad Type A Bus Station, Tangerang
- 32. Tuban Babat Lamongan Gresik Toll Road
- 33. Komering Irrigation System, South Sumatera and Lampung Province (unsolicited)
- 34. High Level Diversion (HLD) Interconnection Channel Lombok, Nusa Tenggara Barat (Unsolicited)
- 35. Lau Biang/Lau Dah (Karo) Water Supply System
- 36. Manggar Waste Management, Balikpapan City
- 37. 40 MW Hydro Power Plant Infrastructure Delivery on Tiga Dihaji Dam, South Sumatera Province (unsolicited)
- 38. Revitalization & Development of Denpasar Street Lighting (Unsolicited)
- 39. Bandung Street Lighting (Unsolicited)

In addition, there are 13 new projects, categorized as under preparation projects in PPP Book 2023:

- 1. Banten Sports Center
- 2. Inche Abdoel Moeis Samarinda General Hospital
- 3. Dr. Mohammad Zyn Sampang General Hospital
- 4. Medan Street Lighting (Unsolicited)
- 5. Ngawi Street Lighting (Unsolicited)
- 6. Banyumas Street Lighting
- 7. Development and Management of National Research Vessel Fleet
- 8. Development of West Nusa Tenggara Correctional Institution
- 9. Development of Bintan Airport (Unsolicited)
- 10. Padjadjaran University Teaching Hospital
- 11. Preservation of Madiun Regency Road
- 12. Development of Denpasar City Water Supply System
- 13. Revitalization of Non-Revenue Water in Sukabumi City

The PPP Book 2023 includes projects that have either progressed or remained unchanged from the previous edition, as well as new projects that have successfully completed the evaluation process.

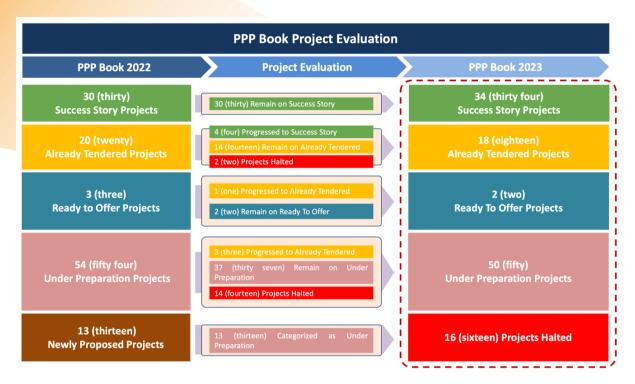


Figure 8: PPP Book Evaluation



Project Summary

The following is the list of projects registered in PPP Book 2023 based on National Development Planning Minister Decree No. KEP.67/M.PPN/HK/06/2023.

Table 1: Ready to Offer Project Summary

No	Project Name	Description	Status (per May 2023)
1.	Semanan - Balaraja Toll Road (Unsolicited)	The Semanan - Balaraja Toll Road section, which is part of the Inner Jakarta Toll Road Network, will have a length of 32.39 km and feature 4 interchanges and 2 junctions. The toll road will start at the East Balaraja Interchange, located at the end of the Serpong-Balaraja Toll Road section.	Ready to Offer (Tender Preparation)
2.	Cikunir-Karawaci Inner City Elevated Toll Road (Unsolicited)	The proposed project is to construct ±40 km of Cikunir-Tomang-Karawaci Inner City Elevated toll road using a PPP scheme. The toll road plan will be positioned above the existing toll road section, starting from Cikunir (at the junction between JORR and the Jakarta - Cikampek toll road) and ending after the Alam Sutera intersection. The Business entity will be responsible for implementing the toll road project under the BOT scheme.	Ready to Offer (Tender Preparation)

Table 2: Under Preparation Project Summary

No	Project Name	Description	Status (per May 2023)
1.	Development of Singkawang Airport	According to the Minister of Transportation's Decree No. KP 1024 of 2018, Singkawang Airport will be situated in Panglimang Village, South Singkawang District. The Singkawang Airport PPP Project is strategically located in an area with potential, particularly due to the proposed Relocation of the Capital City of Indonesia from Jakarta to East Kalimantan. This development is expected to have a positive impact on the surrounding regions, including West Kalimantan Province and Singkawang City. Currently, the Singkawang City Government has successfully completed the land acquisition process, covering a total area of 151.45 ha, in order to expedite the airport's development. The project is planned to be implemented in three phases.	Under Preparation (FBC)
2.	Development of Bintan Airport (Unsolicited)	Bintan Airport will be located in Busung Village, Seri Kuala Lobam District. Master Plan has prepared land for the development of the Aerospace Industrial Park to the northwest of the runway; Working Area to be prepared immediately to accommodate the Aerospace Industrial Park.	Under Preparation (Feasibility Study)
3.	Development of Baubau Port	The development of Murhum Baubau Port aims to meet the growing demand and support the long-term programs of the Baubau Regional Government, which aims to establish the city as a gateway for economy and tourism in Southeast Sulawesi. Among the three ports in Baubau city, Murhum Baubau Port experiences the highest level of economic activity.	Under Preparation (FBC)
4.	Bandung Metropolitan Urban Railway	In 2019 around 12.3 million trips per day were made in Greater Bandung, only 12% of them were made by public transport. It is estimated that about one third (36%) of the road network will be saturated by 2023 and this will increase to about two thirds (70.5%) by 2030. The proposed mass transit project will therefore make better use of limited urban space by moving people faster and more reliably.	Under Preparation (OBC)
5.	Transit Oriented Development (TOD) Poris Plawad Type A Bus Station, Tangerang	With its strategic location, Poris Plawad Type A Bus Station has the potential to become a Transit Oriented Development Area (TOD), as listed in the Jabodetabek Transportation Master Plan (RITJ). The construction plan for the Poris Plawad Type A Bus Station aims to develop the area into an integrated urban transportation node, creating a seamless and sustainable transportation system.	Under Preparation (FBC)
6.	Betan Subing Type A Bus Terminal Development	The Ministry of Transportation has undertaken plans to enhance transportation services by developing a Type A Bus Terminal in Betan Subing, Lampung Province. The primary objective of this project is to improve the quality of terminal infrastructure and provide more efficient and reliable transportation services. The Betan Subing terminal is strategically located near the Trans Sumatra toll road, offering convenient access for travelers. For those reaching the terminal from arterial roads or non-toll roads, there is also a connection available through the national road. Additionally, the presence of the Terbanggi	Under Preparation (OBC)

No	Project Name	Description	Status (per May 2023)
		Besar toll gate provides further accessibility to the Betan Subing terminal. By developing a modern and well-equipped Type A Bus Terminal at Betan Subing, the Ministry of Transportation aims to enhance the overall transportation experience and facilitate smoother travel for passengers in the Lampung Province.	
7.	Purabaya Type A Bus Terminal Development	To improve the quality of the terminal to provide better transportation service, the Ministry of Transportation has planned to develop Purabaya Type A Bus Terminal at Sidoarjo, East Java Province through Public-Private Partnership Scheme. The development of this terminal drives an increase in transportation access and economic development through a mix-used terminal scheme.	Under Preparation (OBC)
8.	Makassar - Maros - Sungguminasa - Takalar Toll Road	The project entails the construction of a Mamminasata toll road, spanning approximately 48 km. This toll road will establish a direct connection between Maros Sub-district and Takalar Sub-district, bypassing Makassar City. It is expected to significantly reduce the logistics distance between these two regions. The Mamminasata Toll Road is designed to feature four trumpet-type interchanges.	Under Preparation (FBC)
9.	Cilacap – Yogyakarta Toll Road	The project aims to construct a 121.75 km toll road connecting Cilacap and Yogyakarta, completing the toll road network in the south of Central Java Province. This infrastructure development is expected to stimulate growth in the central-south region, leveraging its various potentials. The toll road will commence from the endpoint of the Gedebage-Tasikmalaya-Cilacap Toll Road and feature 6 interchanges. Additionally, there will be 1 on/off ramp at the end section, connecting to the NYIA-Yogyakarta-Solo Toll Road.	Under Preparation (FBC)
10.	Demak – Tuban Toll Road	The project involves the construction of a 179.55 km toll road connecting Demak and Tuban, which aims to support Presidential Regulation Number 79/2019 and Presidential Regulation Number 80/2019, while fostering economic and regional growth. This toll road will feature 7 interchanges and 1 junction, enhancing connectivity and accessibility in the area.	Under Preparation (FBC)
11.	Malang – Kepanjen Toll Road (Unsolicited)	The project is to construct a ±29.787 km toll road of Malang-Kepanjen which is expected to overcome traffic problems and boost economic and regional growth. This toll road is equipped with 2 junctions and 4 interchanges.	Under Preparation (Tender Preparation)
12.	Ngawi – Bojonegoro – Babat Toll Road	The project involves the construction of a 106,409 km toll road known as Ngawi-Bojonegoro-Babat, which has been designated under Presidential Regulation Number 80/2019. This toll road will feature 2 junctions and 3 interchanges, and it is strategically positioned to pass through key areas such as the Gas Unitization Field Development of Jambaran-Tiung Biru in Bojonegoro Regency and the Cepu Area Block.	Under Preparation (FBC)

No	Project Name	Description	Status (per May 2023)
13.	Semarang Harbour Toll Road Integrated with Water Resource Control System (Unsolicited)	The project is to construct ± 20.16 km of Semarang Harbour toll road which connects the Semarang-Batang Toll Road and Semarang-Demak Toll Road to complete the Ring Road around the City of Semarang. This toll road will be integrated with the sea dike and retention pond in the city of Semarang. The return of investment of the sea dike comes from the development of the reclamation area given to the winner of the auction while the retention pond will be financed by the government of Semarang city and other financing schemes.	Under Preparation (Tender Preparation)
14.	Tuban - Babat - Lamongan - Gresik Toll Road	Tuban - Babat - Lamongan - Gresik toll road will form a crucial linkage along the northern coast of Java Island, connecting Surabaya, Semarang, and Jakarta. The primary purpose of this toll road is to enhance accessibility, particularly for PT Pertamina Rosneft's Tuban Oil Refinery development plan and the Gresik Special Economic Zone (SEZ).	Under Preparation (FBC)
15.	Preservation of Madiun Regency Road	In order to support Presidential Regulation No. 80 of 2019 related to the Selingkar Wilis and Lingkar Selatan Priority Areas having the theme of developing agro-industry and agropolitan added value through the provision of supporting infrastructure that connects with growth centers, the Madiun Regency Government is implementing a project for Preservation of Madiun Regency Roads which is expected to improve modes of transportation in Madiun Regency.	Under Preparation (Preliminary Study)
16.	Operational and Maintenance (OM) Surabaya - Madura (Suramadu) Bridge Bundling Bandara Juanda - Tanjung Perak Toll Road (Surabaya Eastern Ring Road/SERR)	The Suramadu Bridge, connecting Surabaya City and Madura Island (Bangkalan), holds the distinction of being the longest cable-stayed bridge in Indonesia. Spanning a length of 5,438 meters and designed for a service life of 100 years, the bridge requires ongoing operation and maintenance. There is a potential opportunity to finance the operation and maintenance of the Suramadu Bridge by bundling it with the Juanda Airport - Tanjung Perak Toll Road (SERR).	Under Preparation (FBC)
17.	Batam - Bintan Bridge	The project aims to construct a bridge connecting Batam and Bintan, which are located in the Riau Islands province. The project will utilize a Public-Private Partnership (PPP) scheme, with a user charge as the return of investment scheme	Under Preparation (Tender Preparation)
18.	Development of Bodri Dam in Kendal Regency	The Bodri River, situated in a coastal area and intersected by 12 rivers, holds great potential for multiple purposes, including irrigation, raw water supply, electricity generation, and flood control in Kendal district. The project aims to encompass the design, construction, financing, and maintenance of the dam, as well as the associated infrastructure and transfer systems. Its primary objective is to harness the resources of the Bodri River effectively, providing sustainable solutions for water management, power generation, and flood mitigation in the region.	Under Preparation (FBC)

No	Project Name	Description	Status (per May 2023)
19.	Development of Merangin Dam	The Merangin Dam project is a multifunctional dam designed to serve various purposes. It will provide irrigation for an area of 12,000 hectares, effectively control floods with a capacity of approximately 583.5 cubic meters per second in the densely populated lower part of the Merangin basin. The dam will also serve as a raw water source, supplying approximately 2 cubic meters per second, and has the potential to generate electricity with a capacity ranging from 90 to 107.5 megawatts	Under Preparation (FBC)
20.	Komering Irrigation System (Unsolicited)	Komering Irrigation Area has a potential of 121,500 Ha. From 1990 to 2015, a functional irrigation network covering an area of 59,148 Ha has been built, consisting of Komering Primary Channel, Secondary Channel, as well as Rehabilitation of Secondary and Tertiary Channel.	Under Preparation (Feasibility Study Evaluation)
21.	High Level Diversion (HLD) Interconnection Channel Lombok (Unsolicited)	High Level Diversion (HLD) is a water dividing system that spans 12 watersheds. This system consists of two interdependent main channels and 24 dependent channels which are connected to 490 headworks. HLD aims to transfer water from surplus watersheds to deficit watersheds.	Under Preparation (Feasibility Study Evaluation)
22.	40 MW Hydro Power Plant on Tiga Dihaji Dam (Unsolicited)	The Project is located on Tiga Dihaji Dam, Komering River Basin, South Ogan Komering Ulu (OKU) Regency, South Sumatera Province. The Project is proposed by using Unsolicited PPP through Design, Build, Finance, Operate, Maintain and Transfer (DBFOMT) scheme. It is estimated generating electricity with 40 MW capacity.	Under Preparation (Feasibility Study Evaluation)
23.	Development of Kamijoro Regional Water Supply System	The Kamijoro Regional Water Supply system is a provincial project in the Special Region of Yogyakarta. Its primary objective is to provide a reliable drinking water supply (Air Minum Curah) to the regencies of Bantul and Kulon Progo. The project was initiated in response to the limited water resources available to the local communities, while also catering to the growing demands resulting from the development of the New Yogyakarta International Airport and industrial areas within the two regencies. To achieve this, the project utilizes bulk water sourced from the Progo River through the Kamijoro Dam. The planned capacity of the system is to supply 475 liters per second (lps) of drinking water, with 189 lps allocated to Bantul Regency and 286 lps to Kulon Progo Regency.	Under Preparation (FBC)
24.	Development of Sinumbra Regional Water Supply System (Unsolicited)	The Greater Bandung Metropolitan Regional Water Supply Project West Region-1 Sinumbra (Sinumbra Water Supply) is a Drinking Water Supply System that will supply bulk water to western parts of the Bandung Metropolitan area with a capacity of 1,200 Liters/second to serve 120,000 house connections. The Sinumbra Regional Water Supply System supplies water from 3 springs in Sinumbra Plantation at 1,300-1,428 m asl to Metropolitan Bandung Area (approx. 700 m asl).	Under Preparation (Tender Preparation)
25.	Ir. H. Djuanda Regional Water Supply (Jatiluhur II) (Unsolicited)	Ir H Djuanda (Jatiluhur II) project aims to improve water access and service to the public through applying the end-to-end method (construction from upstream to customer connections). Ir. H. Djuanda Water Supply has a production capacity of 6,790 lps, with a raw water capacity around 7,000	Under Preparation (Feasibility Study Evaluation)

No	Project Name	Description	Status (per May 2023)
		lps. The project will serve 4 areas, that consist of: DKI Jakarta (2,054 lps), Bekasi City (1,051 lps), Bekasi Regency (1.371 lps), and Bogor Regency (2.012 lps).	
26.	Lau Biang/Lau Dah (Karo) Water Supply System	Lau Biang / Lau Dah Drinking Water Supply System is planned to provide clean water services in Karo Regency and expand services to the Kabanjahe City area.	Under Preparation (Preliminary Study)
27.	Development of Jatigede Regional Water Supply System	The Jatigede Water Supply Project is designed to address the growing water demand in West Java by increasing the water supply capacity. The project serves as a water source for five regional areas: Sumedang Regency, Majalengka Regency, Cirebon Regency, Indramayu Regency, and the City of Cirebon. The project aims to provide a drinking water capacity of 2,000 liters per second (lps) at Kadipaten in Majalengka Regency. This increased capacity will ensure a reliable and sufficient water supply to meet the needs of the communities in the respective regions.	Under Preparation (FBC)
28.	Development of Denpasar City Water Supply System	The amount of water loss (NRW) is quite large, namely 40.43%, so that the benefits felt by customers are not optimal. In addition, the current population of Denpasar City who uses drinking water from the Regional Company of Denpasar City is only around 67.84% or 89,126 customers (Domestic and Non Domestic), the rest prefer to use drilled wells.	Under Preparation (OBC)
29.	Revitalization of Non- Revenue Water In Sukabumi City	Regional Public Water Company Tirta Bumi Wibawa Sukabumi City. Regional owned enterprise engaged in the distribution of clean water to the general public. Non-Revenue Water Revitalization Planning in the Cinumpang, Cigadog and Batu Karut Systems to provide maximum drinking water services to the community. The scope of this project is to design, build, finance, operate, maintain supporting infrastructure.	Under Preparation (Preliminary Study)
30.	Piyungan Waste Treatment	Due to the increase in waste volume entering Piyungan Landfill, the capacity of the landfill has been exceeded. It is essential to implement appropriate waste management technology and professional operation management to address this issue effectively. Piyungan Landfill currently receives approximately 600 tonnes of waste per day from Yogyakarta City, Sleman Regency, and Bantul Regency. With the implementation of suitable waste management practices, including efficient waste segregation, recycling, and disposal techniques, the landfill's operations can be improved to handle the increasing waste volume in a sustainable manner.	Under Preparation (FBC)
31.	Manggar Waste Management	The waste management facility, Manggar Landfill, located in Balikpapan City, East Kalimantan, handles a daily waste volume of 415 tonnes. The project encompasses the design, construction, financing, operation, and maintenance of waste processing using sustainable technology. It involves the processing and disposal of waste, as well as generating additional income through the sale of by-products derived from the waste treatment process	Under Preparation (FBC)

No	Project Name	Description	Status (per May 2023)
32.	Development of Waste to Energy Facility in South Tangerang	The waste management project - Cipeucang Landfill in South Tangerang, Banten, handles approximately 800 tonnes of waste per day. The project includes the construction and operation of a Waste-to-Energy (WTE) plant, which will convert the waste into electricity. The specific electricity output and the Purchased Agreement with PLN (Perusahaan Listrik Negara) will be determined during the finalization of the Final Business Case. The project's scope encompasses the design, construction, financing, operation, and maintenance of the WTE plant and its supporting infrastructure. By implementing this project, it aims to address waste management challenges, generate electricity from waste, and contribute to sustainable and efficient waste management practices in the region.	Under Preparation (FBC)
33.	Integrated Hazardous and Specific Waste Management Facility in Sumatera	This project aims to develop the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area with PPP scheme. The project scheme implemented will be build-operate-transfer. The proposed location for this project will be at Simalungun Regency, North Sumatera (indicative option).	Under Preparation (OBC)
34.	Development of Palapa Ring Integration	The Palapa Ring Integration project aims to develop a fiber optic backbone infrastructure to enhance broadband access and expand frequency coverage for telecommunications. This initiative is expected to have a significant impact on economic growth and support the development of existing Palapa Ring utilities. Recognized as a National Strategic Project (PSN), the project encompasses the construction of a fiber optic network along with the necessary equipment, which can be leased or utilized by telecommunications operators and users. By improving connectivity and providing reliable telecommunications services, the Palapa Ring Integration project aims to facilitate technological advancement and foster economic development in the region.	Under Preparation (FBC)
35.	Natural Gas Distribution Network for Batam City Households	Construction and operation network distribution of household gases from the tie-in to stove connection for 307,749 home connections in Batam City. There are 2 (two) business activities related to piped gas, as a transporter and as a gas distributor through pipelines.	Under Preparation (OBC)
36.	Natural Gas Distribution Network for Palembang City Households	Construction and operation network distribution of household gases from the tie-in to stove connection for 354,441 home connections in Palembang City. There are 2 (two) business activities related to piped gas, as a transporter and as a gas distributor through pipelines.	Under Preparation (OBC)
37.	Bandung Street Lighting (Unsolicited)	In order to improve infrastructure services, Bandung District Government will build and repair public street lighting. From the existing 13,432 units of street lighting, it will be added to 28,250 units of lamps using LED technology. This project is planned using the PPP scheme.	Under Preparation (Feasibility Study Evaluation)
38.	Revitalization & Development of Denpasar Street Lighting (Unsolicited)	Current condition of street lighting in Denpasar City is still using old technology, which consume a lot of energy and lead to waste in financing. Besides, there are still many areas that have not been illuminated by street lights.	Under Preparation (Pre Feasibility Study Evaluation)

No	Project Name	Description	Status (per May 2023)
39.	Medan Street Lighting (Unsolicited)	The Medan City Government plans to build 124,038 public street lighting and install Light Emitting Diode (LED) lamp technology equipped with smart systems. The City Government also build a command center to control and operate the street lighting.	Under Preparation (Feasibility Study Evaluation)
40.	Banyumas Street Lighting	The Banyumas Regency Government are plan to build around 10,000 public street lighting and install Light Emitting Diode (LED) lamp technology on each environmental road section in 331 Villages and in 27 Districts.	Under Preparation (Preliminary Study)
41.	Ngawi Street Lighting (Unsolicited)	The street lighting services in Ngawi Regency is inadequate. Only 18.3% have been served by street lighting out of 604 km of national and regency roads. Through the PPP Scheme, the Ngawi Regency Government planned to add new street lighting points to increase the coverage of services as well as replacing existing lamp types to LED to increase energy efficiency. Based on the initial study, the street lighting project is planned to be implemented with the scope of 5,700 new lamp points and 2,048 replacement points.	Under Preparation (Pre Feasibility Study Evaluation)
42.	Development and Management of National Research Vessel Fleet	The project will support marine research conducted by the National Research and Innovation Agency (BRIN) and its partners, in the areas of supporting marine research activities, which will focus on four types of marine research, namely: marine geosciences, marine fisheries, oceanography and hydrography.	Under Preparation (OBC)
43.	Padjadjaran University (UNPAD) Teaching Hospital	To improve the quality of health services in West Java Province, Padjadjaran University is planning to build a State University/College Hospital (RSPTN) on an approximate area of 4.2 hectares. The project will be carried out in two stages with the second phase to build building B consisting of 5 floors and 2 basements will be implemented through PPP scheme.	Under Preparation (Preliminary Study)
44.	Banten Sports Center	Banten Sports Center Complex to become one of international-standard sports complex in Indonesia within the area of ±68 ha. This project has an objective to build sports center complex in Banten with high-demand sports venue and commercial area	Under Preparation (OBC)
45.	Inche Abdoel Moeis Samarinda General Hospital	Inche Abdoel Moeis Samarinda General Hospital is in the development stage of becoming an international standard hospital. The hospital service coverage area can potentially become a Regional Referral for the Provinces of East Kalimantan and North Kalimantan.	Under Preparation (OBC)
46.	Dr. Mohammad Zyn Sampang General Hospital	Dr. Moh Zyn General hospital is a type B hospital and plans to relocate due to frequent flooding in the current location. The only referral hospital for clinics/hospitals around it. However, the current condition is challenging to develop into a standard Type B, and there is a need for additional beds and an area of 27,040 m2. In the new location, apart from hospitals, offices, parks and Islamic centers will be built.	Under Preparation (OBC)

No	Project Name	Description	Status (per May 2023)
47.	Development of West Nusa Tenggara Correctional Institution	The Ministry of Law and Human Rights (KemenkumHAM) plans to build a LAPAS by utilizing land located on the island of Lombok, West Nusa Tenggara Province. This location is currently used as an Assimilation and Education Facility (SAE) for Correctional Assisted Residents (WBP) at Selong LAPAS, East Lombok Regency. The main thought of the scope of the assigned PPP project is to provide LAPAS by utilizing the tourism potential at the SAE location which will be managed by private companies. Seeing the situation from the SAE location, the land area on the Right to Use Certificate owned by the Ministry of Law and Human rights is 153,500 m2. The land around the beach is used for recreation by local residents with an area of around 25.000 m2 and the remaining 130.000 m2 is dry land without irrigation.	Under Preparation (OBC)
48.	Bina Harapan Cisaranten Housing	On a 5-hectare land parcel, a development project is underway to construct affordable housing units alongside commercial facilities. The project encompasses eleven towers, and it is estimated to have a potential of accommodating approximately 2,738 housing units. This endeavor aims to provide affordable housing options while also incorporating commercial spaces, creating a vibrant and sustainable community within the development.	Under Preparation (FBC)
49.	Sei Mangkei Public Housing	To cater to the housing requirements of workers in the Sei Mangkei Industrial Area, a project has been planned to construct three towers of rental flats. Each tower will be comprised of 18 floors and accommodate a total of 672 units. Additionally, one of the apartment towers will have 16 floors with 132 rooms, while the other tower will be a 15-floor hotel. The project will be developed on a land area spanning 3.3 hectares, providing an adequate living space for the industrial area's workforce.	Under Preparation (FBC)
50.	Karawang Spuur Public Housing	Karawang Spuur Housing PPP Project is a public housing project on a 1.9 ha Ministry of MPWH-owned land. The location of the PPP project is located on Jalan Karawang Spuur, Wadas Village, East Telukjambe District, Karawang, West Java. The land is located in the urban area of Karawang, a few minutes from schools, universities, and industrial areas. Besides that, the location has high accessibility, minutes away from the West Karawang 1 toll gate, and the Karaba Indah bus stop. The project will cover the construction of 2 towers, resulting in 1.175 residential units.	Under Preparation (FBC)

Summary of Estimated Investment for PPP Project

No	Project Name	Estimated Project Cost (USD Million)			
Rea	Ready to Offer				
1	Semanan – Balaraja Toll Road (Unsolicited)	1,049.31			
2	Cikunir-Karawaci Inner City Elevated Toll Road (Unsolicited)	1,766.89			
Und	Under Preparation				
1	Construction of Singkawang Airport	117.00			
2	Construction of Bintan Airport	755.26			
3	Development of Baubau Port	16.95			
4	Bandung Metropolitan Bandung Railway	785.74			
5	Transit Oriented Development (TOD) Terminal Type A Poris Plawad, Tangerang	71.33			
6	Betan Subing Type A Terminal Development	16.22			
7	Purabaya Type A Terminal Development	23.65			
8	Makassar-Maros-Sungguminasa-Takalar Toll Road	722.21			
9	Cilacap – Yogya Toll Road	3,379.05			
10	Demak – Tuban Toll Road	3,440.27			
11	Malang – Kepanjen Toll Road (Unsolicited)	726.91			
12	Ngawi - Bojonegoro - Babat Toll Road	2,142.51			
13	Semarang Harbour Toll Road (Unsolicited)	1,298.52			
14	Tuban - Babat - Lamongan - Gresik Toll Road	1,618.08			
15	Preservation of Madiun Regency Road	92.70			
16	Operational and Maintenance (OM) Surabaya-Madura (Suramadu) Bridge	721.35			
17	Batam-Bintan Bridge	1,029.60			
18	Construction of Bodri Dam in Kendal Regency	117.82			
19	Construction of Merangin Dam	429.77			
20	Komering Irrigation System	163.78			
21	High Level Diversion (HLD) Interconnection Channel Lombok	112.05			
22	40 MW Hydro Power Plant on Tiga Dihaji Dam	76.08			
23	Construction of Kamijoro Regional Water Supply System	21.9-23.70			
24	Development of Sinumbra Water Supply System	49.69			
25	Ir. H. Djuanda Water Supply (Jatiluhur II) (Unsolicited)	1,144.12			
26	Lau Biang/Lau Dah (Karo) Water Supply System	7.68			
27	Construction of Jatigede Regional Water Supply System	139.69			

No	Project Name	Estimated Project Cost (USD Million)
28	Develompment of Denpasar City Water Supply System	20.86-55.09
29	Revitalization of Non-Revenue Water in Sukabumi City	Under Calculation
30	Piyungan Waste Treatment	30.00-40.00
31	Manggar Waste Management	33.24
32	Construction of Waste to Energy Facility in South Tangerang	120.80
33	Integrated Hazardous Waste Management System in Sumatera Region	66.98
34	Construction of Palapa Ring Integration	518.35
35	Natural Gas Distribution Network for Batam City Households	160.14
36	Natural Gas Distribution Network for Palembang City Households	216.22
37	Bandung Street Lighting (Unsolicited)	16.01
38	Revitalization & Development of Denpasar Street Lighting (Unsolicited)	34.52
39	Medan Street Lighting (Unsolicited)	98.61
40	Banyumas Street Lighting	Under Calculation
41	Ngawi Street Lighting (Unsolicited)	5.60
42	Development and Management of a National Research Vessel Fleet	257.30
43	Padjadjaran University Teaching Hospital	25.58
44	Banten Sport Center	34.86
45	Development of I A Moeis Regional Hospital Samarinda City	56.30
46	Dr. Mohammad Zyn Sampang General Hospital	16.89
47	Development of West Nusa Tenggara Correctional Institutions	10.14
48	Bina Harapan Cisaranten Housing	27.03-54.05
49	Sei Mangkei Public Housing	76.63
50	Karawang Spuur Public Housing	27.25
TOT	AL PROJECT COST	23,962.48

^{*}Only the highest cost option is chosen *Exchange rate USD 1 = Rp 14,800



Semanan-Balaraja Toll Road

Location: Tangerang, Banten Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The Semanan - Balaraja Toll Road section, which is part of the Inner Jakarta Toll Road Network, will have a length of 32.39 km and feature 4 interchanges and 2 junctions. The toll road will start at the East Balaraja Interchange, located at the end of the Serpong-Balaraja Toll Road section.

Estimated Project Cost: USD 1,049.31 Million

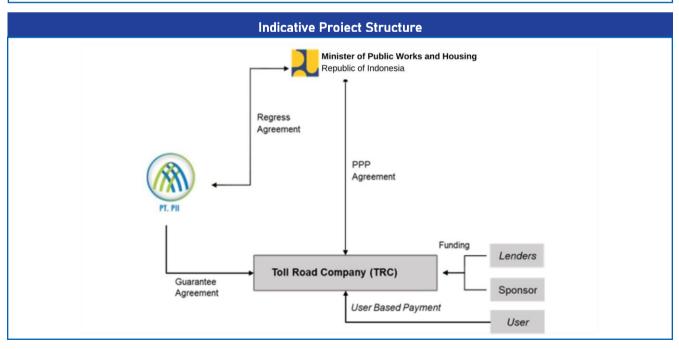
Financial Feasibility:

FIRR : 12.04%

NPV : USD 4,37 Million

Estimated Concession Period: 40 years

Indicative Project Schedule Agreement Request for Financial Pre-Bid Award Construction Proposal Q4 2023 Qualification Signing Q1 2024 Close Q1 2024 Q4 2024 Q3 2024 Q3 2023 Project Status: Tender Preparation



Project Title	Semanan-Balaraja Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Unit	Indonesia Toll Road Authority (BPJT)
Preparation Agency	1. PT Alam Sutera Realty
	2. PT Perentjana Djaja
Project Cost	USD 1,049.31 Million
Estimated Concession Period	40 Years
Location	Tangerang, West Java

1. Project Picture (Map and/or Illustration of Project)

Semanan-Balaraja Toll Road will become an integrated section of the Jabodetabek Toll Road Network.



Picture 1 - Jabodetabek Toll Road Network

2. The Opportunity

2.1. Project Background

The development of the area in the west of Jakarta, specifically the city of Tangerang and the Regency of Tangerang, needs a high level of accessibility both within the region and to/from outside the region. To date the development of residential and industrial zones in the Pasar Kemis and surrounding areas is the cause of economic and social growth, thus triggering an increase in the movement of people and goods.

Currently, the movement of traffic from Tangerang and other cities in the west of Jakarta is facilitated by the Jakarta-Tangerang Toll Road, the Jakarta Inner City Toll Road, and the Jakarta Outer Ring Road Toll. The traffic flow conditions on these roads are already quite congested. To overcome the congestion on these roads, it is necessary to build alternative roads with an adequate level of accessibility and mobility. The Semanan- Balaraja Toll Road is a continuation of the planned 6 inner city toll roads of Jakarta and can be an alternative to overcome the problem.

2.2. Project Description

The Semanan- Balaraja Toll Road Plan is part of the Jabodetabek Toll Road Network which stretches 32.715 km. The starting point of the project is the end of the Serpong-Balaraja toll road which is located at the Balaraja

Interchange east of the Tangerang-Merak toll road. From that point, the road heads north and turns east in the Rajeg area. The road will then end in the Semanan area.

There will be 6 interchanges and 2 junctions on this toll road. The interchanges in this toll road are Pasar Kemis 1 Interchange, Pasar Kemis 2 Interchange, Rajeg 2 Interchange, Sepatan Interchange, Lebak Wangi Interchange, and Batu Ceper Interchange. The two junctions are Balaraja Junction and Rajeg 1 junction. Starting from the Lebak Wangi Interchange to Semanan on/off ramp, this toll road will be an elevated toll road running alongside the Cisadane River and Mookervart River.

2.3. Project Objectives

The objective of Semanan - Balaraja Toll Road is to support the development and accessibility of Tangerang and the surrounding area west of Jakarta.

3. Business Entity's Scope of Work

The scope of work for the business entity will be design-build-finance-operate-maintenance-transfer.

4. Technical Specification

No	Facilities	Capacity
1	Length	32.39 km
2	Design Speed	80 Km/hr
3	Number of Lane	2x2 (initial stage)
4	Lane Width	3.50 m
5	Outer Shoulder Width	3.00 m
6	Inner Shoulder Width	1.00 m
7	Median Width (including inner	4.50 m
	shoulder)	

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The schedule of the AMDAL study has been explained in the feasibility study document and business plan. Currently, the EIA Terms of Reference (KA-ANDAL) have been issued by the project preparation agency.

6. Land Acquisition and Resettlement Action Plan

Land Acquisition plans have been made with a cost of approximately USD 420.03 million.

7. Project Cost Structure

Estimated Project Cost	USD 1,049.31 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	12.04%
NPV	USD 4,37 Million

8. Government Support and Guarantee

The study has indicated that this project needs government support in terms of the Land Acquisition Process (Land Cost include in Investment Cost) and government guarantee from PT PII.

9. Contact Information

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Position : Head of Investment Division, Indonesia Toll Road Authority

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Email : bpjt@pu.go.id



Cikunir-Karawaci Inner City Elevated Toll Road

Location: DKI Jakarta and Banten Provinces



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The proposed project is to construct ±40 km of Cikunir-Tomang-Karawaci Inner City Elevated toll road using a PPP scheme. The toll road plan will be positioned above the existing toll road section, starting from Cikunir (at the junction between JORR and the Jakarta - Cikampek toll road) and ending after the Alam Sutera intersection. The Business entity will be responsible for implementing the toll road project under the BOT scheme.

Estimated Project Cost: USD 1,766.89 Million

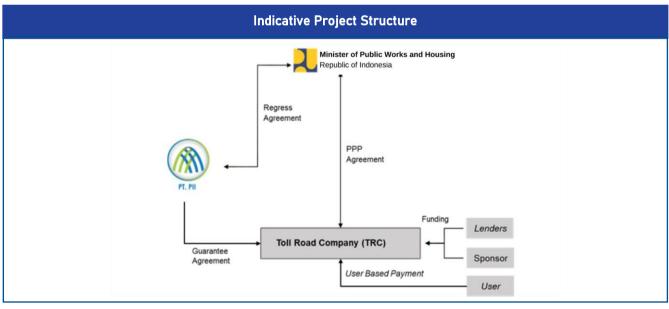
Financial Feasibility:

FIRR : 12.07%

NPV : USD 217,26 Million

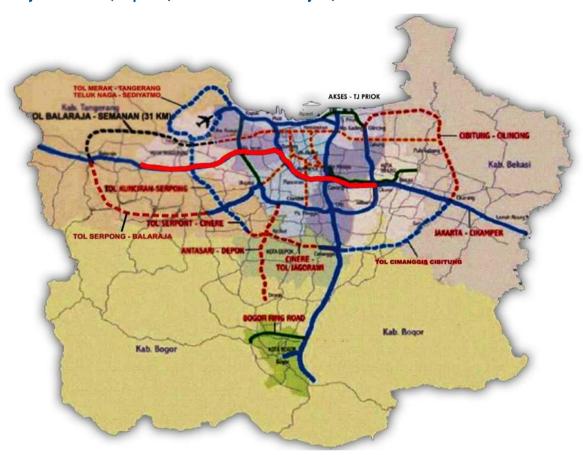
Estimated Concession Period: 40 years





Project Title	Cikunir-Karawaci Inner City Elevated Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Agency	Indonesia Toll Road Authority (BPJT)
Preparation Agency	PT Earth Investment Indonesia – PT Lintas
	Indonesia Sejahtera
Project Cost	USD 1,766.89 Million
Estimated Concession Period	40 Years
Location	DKI Jakarta and Banten

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Jabodetabek Toll Road Network

2. The Opportunity

2.1. Project Background

The development of the Jabodetabek Area (Jakarta, Bogor, Tangerang, Bekasi) has grown rapidly, especially in the east-west corridor, starting from Bekasi District, Bekasi City, DKI Jakarta, Tangerang City, and Tangerang District, which require a high level of accessibility. At present, the traffic flow on the Jakarta-Tangerang Toll Road, Jakarta Inner Ring Road, and Jakarta Outer Ring Road is very congested (already saturated) with V / C Ratio already greater than 0.8. In addition, the construction of the Jakarta-Cikampek Elevated Toll Road is currently underway, one of which ends in Cikunir.

Cikunir-Karawaci Inner City Elevated Toll Road Section will be an additional alternative to the existing Toll Road section in Jakarta. This toll road will be located above the existing Toll Road, therefore it can improve the performance of the road network in Jabodetabek and it can overcome congestion problems.

2.2. Project Description

Cikunir-Karawaci Toll Road Section (± 40 km) is located in Banten Province (Tangerang City and Tangerang District), DKI Jakarta Province, and Banten Province (Bekasi City). The proposed toll road plan will be above the existing toll road section. The starting point of the project is located in Cikunir (at the junction between JORR and the Jakarta-Cikampek toll road), which is the beginning of the Jakarta - Cikampek elevated toll road. The end of the project is located after the Alam Sutera intersection. Location of main on/off ramp points as follows:

- East Pondok Gede;
- Cawang Junction;
- Pancoran;
- · Semanggi;
- Palmerah;
- Tomang;
- Meruva: and
- · Kembangan.

2.3. Project Objectives

The objectives of the Cikunir-Karawaci Inner City Elevated Toll Road are to improve the performance of the road network in Jabodetabek and to overcome traffic congestion in the western area of Jakarta.

3. Business Entity's Scope of Work

Design-Build-Finance-Operate-Maintenance-Transfer (DBFOMT)

Business entity shall be responsible to perform the toll road project, including designing, financing, construction, operating, and maintenance.

4. Technical Specification

Planning standards use all regulations and specifications that apply in Indonesia, such as regulations issued by The Directorate General of Highways, SNI, and other regulations.

No	Facilities	Capacity
1	Length	± 40km
2	Lane number	2 + 2
3	Design Speed	
	Main road	80 Km/hr
	Ramp (toll-to-toll)	40-60 Km/hr
	Ramp (toll-to-non toll)	40-60 Km/hr
4	Lane Width	3.50 m
5	Outer Shoulder Width	2.00 m
6	Inner Shoulder Width	0.50 m
7	Median Width	
	Median concrete barrier	0.80 m
	Median width including inner shoulder	1.80 m

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The feasibility study of the project indicates the need of Environmental Impact Assessment (EIA/AMDAL) to be prepared later.

6. Land Acquisition and Resettlement Action Plan

The study indicated Land Acquisition and Resettlement Action Plan needs for land acquisition of 82,204 m².

7. Project Cost Structure

Estimated Project Cost	USD 1,766.89 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	12.07%
NPV	USD 217.26 Million

8. Government Support and Guarantee

Government support is identified for the land acquisition process (Land Cost included in Investment Cost). The government guarantee is needed from PT PII

9. Contact Information

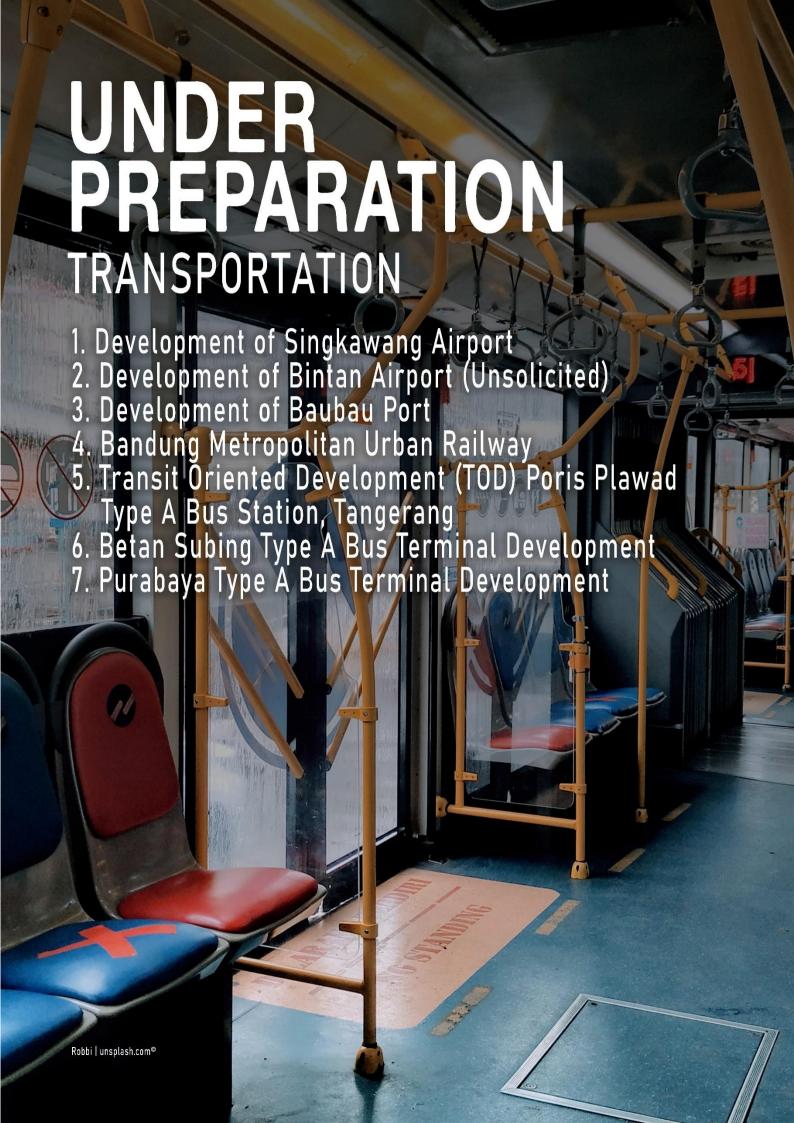
Name : Denny Firmansyah

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Phone : +6221 - 7258063

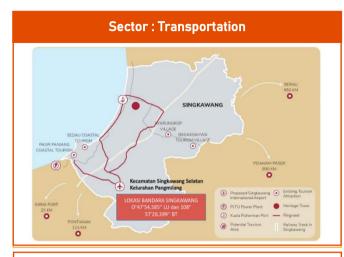
Email : bpjt@pu.go.id





Development of Singkawang Airport

Location: Singkawang, West Kalimantan Province



Government Contracting Agency:

Minister of Transportation handed over to Director General of Civil Aviation

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Airport

Description:

According to the Minister of Transportation's Decree No. KP 1024 of 2018, Singkawang Airport will be situated in Panglimang Village, South Singkawang District. The Singkawang Airport PPP Project is strategically located in an area with potential, particularly due to the proposed Relocation of the Capital City of Indonesia from Jakarta to East Kalimantan. This development is expected to have a positive impact on the surrounding regions, including West Kalimantan Province and Singkawang City. Currently, the Singkawang City Government has successfully completed the land acquisition process, covering a total area of 151.45 ha, in order to expedite the airport's development. The project is planned to be implemented in three phases.

Estimated Project Cost: USD 117.00 Million

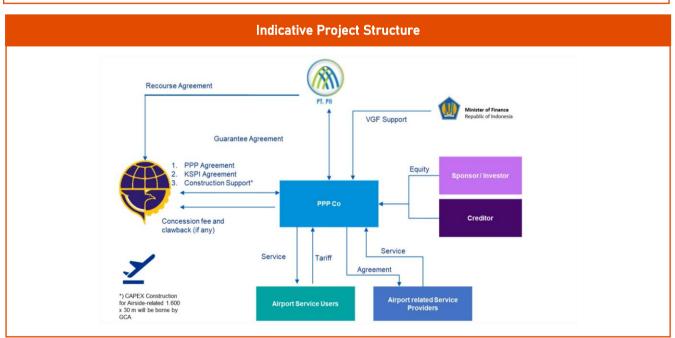
Financial Feasibility:

IRR : 15.36%

NPV : USD 15.50 Million

Estimated Concession Period: 33 years (Including 3

years of construction)



Project Title	Construction of Singkawang Airport
Government Contracting Agency	Minister of Transportation handed over to
	Director General of Civil Aviation
Implementing Agency	Directorate General of Civil Aviation
Preparation Agency	Directorate General of Civil Aviation with
	support from PT PII (PDF assignment by the
	Ministry of Finance)
Project Cost	USD 117.00 Million
Estimated Concession Period	33 years of operation including 3 years of
	construction
Location	Singkawang, West Kalimantan

1. Project Picture (Map and/or Illustration of Project)

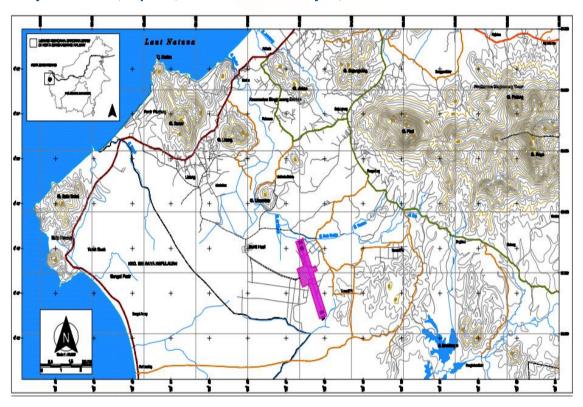


Figure 1 - Map of Singkawang Airport Location

2. The Opportunity

2.1. Project Background

Singkawang City is a city in West Kalimantan Province. It is approximately 153 km from the Provincial Capital, Pontianak City. Singkawang City which is well-known in Chinese culture has several events that are very famous and attract many tourists. Singkawang City also has Simping Island in Sedau Beach with the title of the smallest island in the world that has been recognized by the United Nations (UN).

The variety of attractions that are now starting to interest domestic and foreign tourists in the city, will automatically also have an impact on aspects of the availability of transportation facilities and infrastructure in the City of Singkawang. However, for now, access from the City of Singkawang to the nearest capital or airport namely Supadio International Airport ("PNK") can only be reached by land. Road access that is traversed has many connecting bridges, and if there is damage there will be economic paralysis in Singkawang City and surrounding areas. Therefore, alternative modes of transportation are needed, such as air transportation to support economic and tourism activities in Singkawang City.

2.2. Project Description

The development of the Singkawang Airport will consist of Air Side and Land Side. Air Side development includes Runway, Runway Strip, Runway End Safety Area (RESA), Taxiway, Apron, Airside Service Road, Airside Perimeter Road, and Airside Operation Road. Landside development includes Passenger Terminal, Passenger Parking Area, Conning Tower, Operation Office, Powerhouse, Security Office, Cargo Terminal, and other facilities. The construction of the Project facilities will be based on an agreed design capacity which determine by using the forecast results. The agreed Design Years (DY) are currently 2030; 2040; and 2050, to plan three phases during the concession period.

2.3. Project Objectives

The purpose of Singkawang Airport:

- To support connectivity and accommodate the need for air transportation services in the area of Singkawang
 City, as well as Bengkayang Regency and Sambas Regency ("SINGSEBAS") with a population of approximately
 1 million residents. The nearest airport currently is Supadio Airport, which is located at a distance of 153 km
 or about 3-4 hours of travel time by road from Singkawang City.
- . To improve the accessibility for people and goods movement will increase economic growth.
- To support several other local development plans, including for Singkawang City to be a food produce hub, with tourism potential, potential international passenger demand, etc.

3. Business Entity's Scope of Work

D-B-F-O-M-T (Design - Build - Finance - Operation - Maintenance - Transfer) with user charge payment method.

4. Technical Specification

The technical specifications for Singkawang Airport are as follow:

No	Facilities	Capacity
1	Aerodrome Reference Code	4C
2	Runway Dimension	2500 x 45 m
3	Runway Strip Dimension	2740 x 45 m
4	Runway Strength	60 F/C/X/T
5	Runway End Safety Area (RESA)	90 x 90 (Threshold 16); 90x90 (Threshold 34)
6	Taxiway	2 (Phase 1)
7	Apron Dimension	190 x 100 m (Phase 1)
8	Total Parking Stand	4 (Phase 1)
9	Facilities	Domestic Passenger Terminal (Phase 1)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The City Government of Singkawang is working to fulfill its responsibility in preparing and updating the AMDAL Document for the Project's plan to accommodate the construction of Projects with the adjustment of runway specifications. This will, in addition to the extent of the area affected by the operational and safety areas of the airport, require the handling of the potential environmental impacts during the construction and operation stages of the Project. The mandatory AMDAL activities are regulated in Minister of Environment Regulation 5/2012 concerning Types of Business Plans and/or activities that are required to have an Environmental Impact Analysis (AMDAL).

6. Land Acquisition and Resettlement Action Plan

There is a land requirement of 151.45 ha with a fair value of replacement of USD 958,495.33 sourced from the Singkawang City Government's Budget (APBD) for the Fiscal Year 2019, therefore all assets that have been built through Local Government Budget investments must be handed over to the Directorate General of Air Transport, the Ministry of Transportation to be managed in accordance with the laws and regulations that are applies to the

Infrastructure Provision Cooperation (KSPI in Indonesia abbreviation) scheme through the use of BMN/D (Government Owned Asset) in the form of land.

7. Project Cost Structure

Estimated Project Cost	USD 117.00 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	15.36%
NPV	USD 15.50 Million

8. Government Support and Guarantee

The GCA would need to facilitate the project by means of:

- 1. Viability Gap Fund (VGF)
- 2. Construction Support for the initial phase
- 3. Tax Incentive
- 4. Ease of Permit Issuance

In terms of project guarantee by IIGF, the indicative risk that needs to be guaranteed are:

- 1. Land Acquisition Risk
- 2. Tariff Adjustment Risk
- 3. Political Risk
- 4. Termination Risk

9. Contact Information

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Phone : +6287 888578260

Email : aspar.amri@ymail.com



Development of Bintan Airport

Location: Bintan Island, Riau Archipelago Province

Singapore Pengerang Pengerang Pel, Bentan Talani Beravit Pel, Bentan Talani Beravit Pel, Tanjunguhan Tandunguban Tandunguban Tandunguban Tandunguban Tandunguban Tempeling Bulan Island Bulan Island Rempang Island Citim Island Coogle Mantang Man

Government Contracting Agency:

Minister of Transportation handed over to Director General of Civil Aviation

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector Airport

Description:

Bintan Airport Project is Unsolicited PPP Project. Based on the Decree of the Minister of Transportation No. KP 144 Tahun 2018, Bintan Airport will be located in Busung Village, Seri Kuala Lobam District. Master Plan has prepared land for the development of the Aerospace Industrial Park to the northwest of the runway; Working Area to be prepared immediately to accommodate the Aerospace Industrial Park

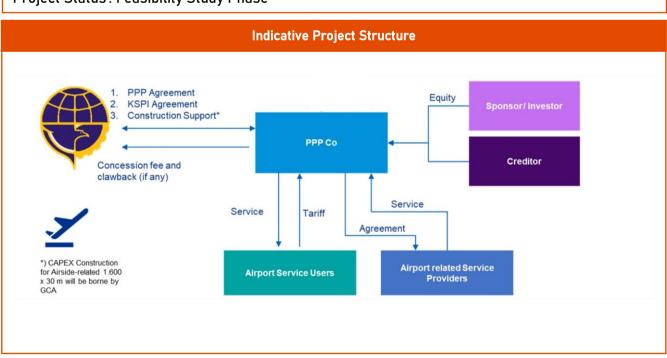
Estimated Project Cost: USD 755.26 Million

Financial Feasibility:

Project IRR : 12.82%

Project NPV : USD 193.45 million Estimated Concession Period: 80 years (Pre-FS Study – Subject to change)





Project Title	Construction of Bintan Airport
Government Contracting Agency	Minister of Transportation handed over to
	Director General of Civil Aviation
Implementing Agency	Directorate General of Civil Aviation
Preparation Agency	PT. Bintan Airport Investments (BAI)
Project Cost	USD 755.26 Million
Estimated Concession Period	80 Years Based on Pre-FS Study (Subject to
	change)
Location	Bintan Island, Riau Islands Province

1. Project Picture (Map and/or Illustration of Project)



Figure 1 - Development of Bintan Airports

2. The Opportunity

2.1. Project Background

Bintan is an Regency in Bintan Island – Riau Archipelago Province. It is approximately 47 km from the Provincial Capital, Tanjung Pinang City. Bintan Island is developed into a tourist area that covers 3.000 ha of the planned 23.000 ha with several large and small resorts developed with the concept of integrated services resorts.

Bintan as a tourists destination that attracts the interest form domestic and foreign tourists, will automatically also have an impact on aspects of the availability of transportation facilities and infrastructure in the Bintan Island. However, for now, access from resorts to the nearest capital or airport namely Raja Haji Fisabililah (TNJ) in Tanjung Pinang can only be reached by land. The other alternatives is Hang Nadim Airport (BTJ) in Batam only be reached by sea transportation. Therefore, alternative modes of transportation are needed, such as air transportation to support economic and tourism activities in Bintan Island.

2.2. Project Description

The development of the Bintan Airport will consist of Airside and Landside. Airside development includes Runway, Runway Strip, Runway End Safety Area (RESA), Taxiway, Apron, Airside Service Road, Airside Perimeter Road, and Airside Operation Road. Landside development includes Passenger Terminal, Passenger Parking Area, Conning Tower, Operation Office, Powerhouse, Security Office, Cargo Terminal, and other facilities. The construction of the Project facilities will be based on an agreed design capacity which determine by using the forecast results.

2.3. Project Objectives

The purpose of Bintan Airport:

- To Support infrastructure for tourism activities and industrial activities on Bintan Island.
- To Increase the development of potential resources, especially Bintan Island in the Riau Archipelago Province
- to support economic, social and cultural development.
- To provide the need for fast, efficient and comfortable transportation in addition to existing transportation.

3. Business Entity's Scope of Work

D-B-F-O-M-T (Design - Build - Finance - Operation - Maintenance - Transfer) with user charge payment method (Subject to Change)

4. Technical Specification

The technical specifications for Bintan Airport are as follow:

No	Facilities	Capacity
1	Aerodrome Reference Code	4C (Phase 1)
2	Runway Dimension	3000 x 45 m
3	Runway Strip Dimension	3120 x 300 m ²
4	Runway End Safety Area (RESA)	90 x 90
6	Taxiway	2 (Phase 1)
7	Apron Dimension	33.300 m² (Phase 1)
8	PKP-PK Category	7 (Phase 1)
9	Facilities	Passenger Terminal 8.830 m² (Phase 1)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

PT. Bintan Aviation Investments is working to fulfil its responsibility in preparing and updating the AMDAL Document for the Project's plan to accommodate the construction of Projects with the adjustment of runway specifications. This will, in addition to the extent of the area affected by the operational and safety areas of the airport, require the handling of the potential environmental impacts during the construction and operation stages of the Project. The mandatory AMDAL activities are regulated in Minister of Environment Regulation 5/2012 concerning Types of Business Plans and/or activities that are required to have an Environmental Impact Analysis (AMDAL).

6. Land Acquisition and Resettlement Action Plan

The land requirement for Bintan Airports is 429,4 ha, the partner of PT. BAI, PT. Surya Bangun Pertiwi (SBP) already occupied 384,9 Ha, with potential expansion to 44,5 ha. PT. SBP will hand over the land that they occupied to the Directorate General of Air Transport, the Ministry of Transportation to be managed in accordance with the laws and regulations that are applies to the Infrastructure Provision Cooperation (KSPI in Indonesia abbreviation) scheme through the use of BMN/D (Government Owned Asset) in the form of land before Financial close of this project.

7. Project Cost Structure

Estimated Project Cost	USD 755.26 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	12.82%
NPV	USD 193.45 Million

8. Government Support and Guarantee

The Pre-FS document indicates the project doesn't need Government Support and Government Guarantee.

9. Contact Information

Name : Arief Mustofa

Position: Vice head of Airport Partnership and Business Division, Directorate of Airport

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Email : ariefnote@gmail.com



Development of Baubau Port

Location: Baubau City, Southeast Sulawesi Province

Sector: Transportation



Government Contracting Agency:

Minister of Transportation handed over to the Director General of Sea Transportation

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Port

Description:

The development of Murhum Baubau Port aims to meet the growing demand and support the long-term programs of the Baubau Regional Government, which aims to establish the city as a gateway for economy and tourism in Southeast Sulawesi. Among the three ports in Baubau city, Murhum Baubau Port experiences the highest level of economic activity.

Estimated Project Cost: USD 16.95 Million

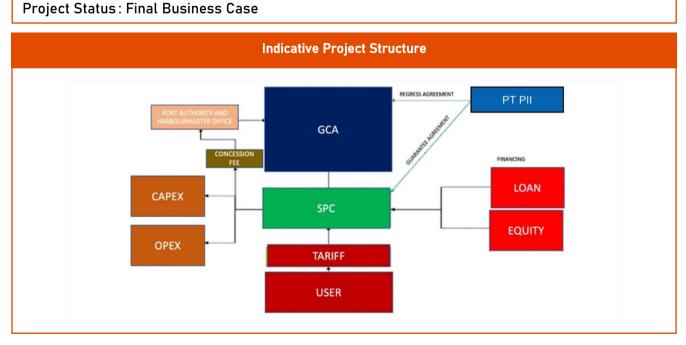
Financial Feasibility:

FIRR : 13.47%

NPV : USD 2.94 Million

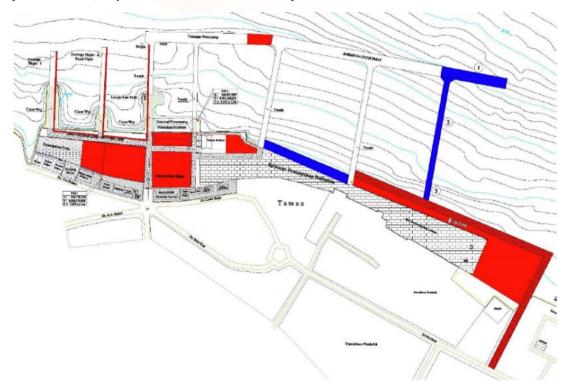
Estimated Concession Period: 30 years

Indicative Project Timeline PQ&Request for Proposal Q2 2023 Bid Award Signing Q2 2024 Q2 2024 Paris to Close Q3 2024 Project Timeline Agreement Signing Q2 2024 Close Q3 2024 Construction Q4 2024



Project Title	Development of Baubau Port
Government Contracting Agency	Minister of Transportation handed over to Director General
	of Sea Transportation
Implementing Agency	Directorate General of Sea Transportation
Preparation Agency	Directorate of Ports
Project Cost	USD 16.95 Million
Estimated Concession Period	30 years
Location	Southeast Sulawesi

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Baubau Port

2. The Opportunity

2.1. Project Background

Baubau Seaport is located in Wolio District, Baubau City, Southeast Sulawesi Province. This port is one of the strategic transportation nodes in the Eastern Indonesia region. Due to this geographical position, Baubau Seaport is in the line of sea transportation movement from western regions of Indonesia such as Jakarta, Surabaya, and the central region like Makassar to the eastern part of Indonesia such as Maluku, North Maluku, Central Sulawesi, and North Sulawesi. Baubau Port is also a gateway for maritime transport for Southeast Sulawesi Province where most of the passenger and goods movement transit at this port.

As stated in the Baubau development roadmap, the Port of Baubau will be further developed to fulfill the need for better service to support the long-term plan of making Baubau the gateway for the economy and tourism area in Southeast Sulawesi. In order to achieve that, the facilities of Baubau Port will need to be upgraded periodically to sustain the demand. The upgrade will include land reclamation, commercial area development, and port terminal development.

2.2. Project Description

The scope of work for Baubau Port Development consists of :

- a. Land zoning rearrangement;
- b. Rehabilitation, operation, and maintenance of existing facilities (traditional shipping, passenger, and multipurpose terminal);
- c. Construction of additional facilities for the development of the port considering demand growth;
- d. Provision of handling equipment to improve port performance level;
- e. Operation and maintenance of added facilities to further upgrade port service level;
- f. Ensure and transfer all assets until the end of the concession period.
- g. Providing handling equipment;
- h. Providing water supply and other utilities.

2.3. Project Objectives

- a. To rehabilitate and expand passenger and multipurpose terminal;
- b. To improve port performance level in cargo and container handling;
- c. To improve safety and security for passengers.

3. Business Entity's Scope of Work

Design-Build - Finance - Operate - Maintenance - Transfer

4. Technical Specification

Landside facilities consist of:

- a. Container Yard
- b. Container Freight Station
- c. Cargo Warehouse
- d. Open Storage
- e. Parking Area
- f. Passenger Terminal
- g. Parking Area

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Project activities that could induce significant environmental impacts are:

- a. Construction workers mobilization
- b. Heavy equipment mobilization
- c. Earthworks and facilities construction
- d. Operational workers recruitment
- e. Seaside facilities operations

6. Land Acquisition and Resettlement Action Plan

Land acquisition is needed for the addition of a gateway and access road to the multipurpose terminal to ease the circulation of cargo and container movements.

7. Project Cost Structure

Estimated Project Cost	USD 16.95 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	13.47%
NPV	USD 2.94 Million

8. Government Support and Guarantee

The government guarantee review will identify the GCA's financial obligations in the PPP structure and the form of risk guarantee required by BUP. It can be guaranteed by PT PII as the Infrastructure Guarantee Business Entity appointed by the Ministry of Finance—meanwhile, the government support regarding the licensing process and coordination with other government agencies.

9. Contact Information

Name : Muhammad Masyhud

Position : Head of Port Development Planning Sub- Directorate of Port

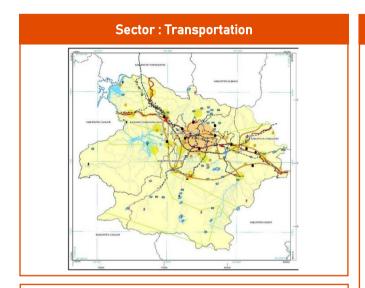
Phone :-

Email : kpbupelabuhan@gmail.com



Bandung Metropolitan Urban Railway

Location: Greater Bandung, West Java Province



Government Contracting Agency:

Governor of West Java Province

Type of PPP:

Solicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Light Rapid Transit

Description:

In 2019 around 12.3 million trips per day were made in Greater Bandung, only 12% of them were made by public transport. It is estimated that about one third (36%) of the road network will be saturated by 2023 and this will increase to about two thirds (70.5%) by 2030. The proposed mass transit project will therefore make better use of limited urban space by moving people faster and more reliably.

Estimated Project Cost: USD 785.74 Million

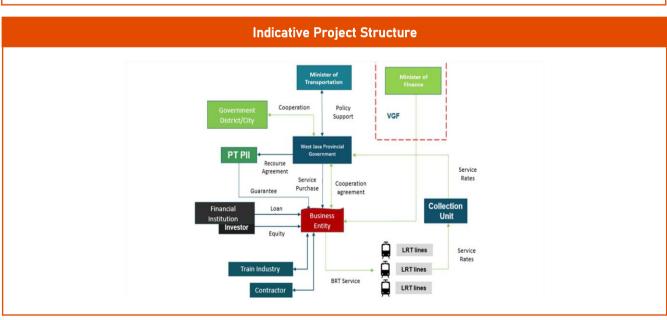
Financial Feasibility:

IRR : 13.3%

NPV: USD 330 Million

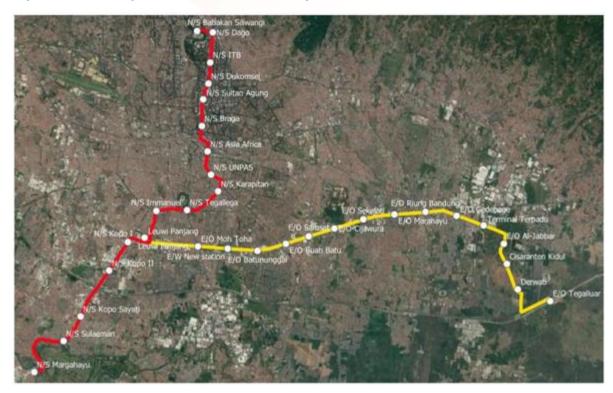
Estimated Concession Period: 34 years (4 years construction and 30 years operation).

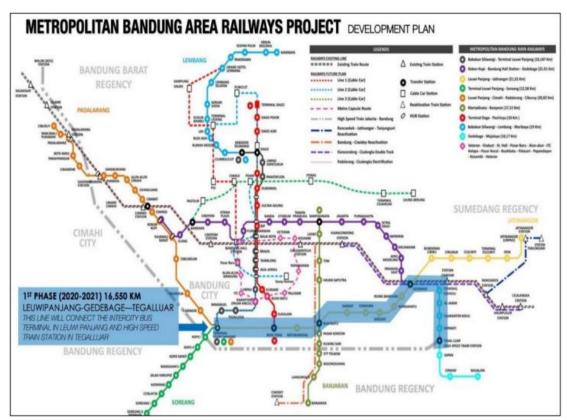




Project Title	Construction of Mass Transportation System in Greater Bandung City
Government Contracting Agency	Governor of West Java Province
Implementing Agency	Transportation Agency of West Java Province
Preparation Agency	Government of West Java Province
Project Cost	USD 785.74 Million
Estimated Concession Period	34 years (4 years construction and 30 years operation)
Location	Greater Bandung, West Java Province

1. Project Picture (Map and/or Illustration of Project)





Picture 1 – BBMA Mass Transportation Master Plan

2. The Opportunity

2.1. Project Background

The development of mass transit transportation in Bandung is aimed to provide more efficient and effective transportation system. In addition, the provision of this transportation infrastructure will be carried out through a Public Private Partnership scheme. This project will support the strategy implementation of an integrated transportation system stated under West Java Regional Medium-Term Development Plan (RPJMD) 2018-2023.

2.2. Project Description

The Mass Transit Transportation project in greater Bandung is located in West Java Province that consists of five regencies/cities, namely Bandung City, Cimahi City, Bandung Regency, West Bandung Regency, and five subdistricts in Sumedang Regency. The first line to be developed from the Mass Transportation System in the Greater Bandung Urban Area is the Babakan Siliwangi Corridor (Bandung City)-Margahayu (Bandung Regency). The estimated total project cost is USD 810,38 Million and LRT depot land area of 72,000 Sqm. The project concession will last for 34 years which divided into 4 years construction and 30 years operation.

2.3. Project Objectives

The project objective is to provide Greater Bandung with an affordable, efficient, effective, integrated, environmentally friendly, and secure public transportation system to serve the mobility needs of the population, reduce congestion, accelerate growth, and support economic, social and cultural development.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

Business entity shall be responsible to perform the Bandung Metropoloitan Urban Railway project, including financing, construction, operating, and maintenance.

4. Technical Specification

The technical specifications for Mass Transit Transportation project in greater Bandung are as follows:

No	Facilities	Capacity
1	Track Gauge	1,435mm
2	Axle load	12 ton
3	Min. curve radius	
	a) Main line	80 m
	b) Depot	60 m
4	Max. gradient	
	a) Main Line	40
	b) Access Depot	60
5	Relative humidity	40 - 98%
	Temperature	18 – 40Hai C
	Rolling stock indicative dimensions	
1	Car set length	110,000 mm
2	Car length	will be decided, based on the estimated demand
3	carriage width	2,700 mm
4	The height of the train from the top of the rail	3,700 mm
5	Max. train floor from above the rail	1,000 mm
	Rolling stock performance	
1	Max. fast operation	80 km/jam
2	Design speed	90 kpj
3	Acceleration rate	1 m/s2
4	Braking rate (emergency)	1 m/s2 (1,3 m/s2)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

This project is categorized as business activities that are required to have an EIA/AMDAL. The GCA will prepare an EIA/AMDAL document for this project. Some inputs are required such as baseline data, complementary plans and studies, such as baseline (business as usual) for noise vibration emission and noise vibration impact monitoring system, noise vibration impact assessment and modeling, construction management plan, COVID-19 response plan and traffic impact analysis.

6. Land Acquisition and Resettlement Action Plan

Land Requirements Based on design items:

Description	Square meter
Land acquisition for main corridor (new acquisition due to realignment)	15,300
Tentative land acquisition for station access	3,400
Tentative land acquisition for station site	19,199
Tentative land acquisition for placement of piers/tracks on existing roads	33,050
Depot	72,000
TOTAL	142,949

The land area that needs to be expanded including underground will be assessed in the subsequent studies.

7. Project Cost Structure

Estimated Project Cost	USD 785.74 Million
Indicative Debt to Equity Ratio	
- Debt Level	75%
- Equity Level	25%
IRR	13.3%
NPV	USD 330 Million

8. Government Support and Guarantee

It is indicated that this project will require government support, such as Viability gap fund (VGF) and government support for infrastructure components (including viaducts, stations and depots).

9. Contact Information

Name: Ir. A. Koswara, MP

Position: Head of Transportation Agency, West Java Provincial Government

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Email : dishub@jabarprov.go.id



Transit Oriented Development (TOD) Poris Plawad Type A Bus Station

Location: Tangerang, Banten Province

Sector: Transportation Soekamo-Hatta Airport 20 minute from terminal Tol Road Kunciran – Baltuceper – Cengkareng **Ikm from terminal Batu Ceper Station Poris Plawad Bus Station

Government Contracting Agency:

Greater Jakarta Transport Authority, Ministry of Transportation

Type of PPP:

Solicited

Return of Investment:

Other Form

Sub-Sector: Passenger Bus Station

Description:

With its strategic location, Poris Plawad Type A Bus Station has the potential to become a Transit Oriented Development Area (TOD), as listed in the Jabodetabek Transportation Master Plan (RITJ). The construction plan for the Poris Plawad Type A Bus Station aims to develop the area into an integrated urban transportation node, creating a seamless and sustainable transportation system.

Estimated Project Cost: USD 71.33 Million

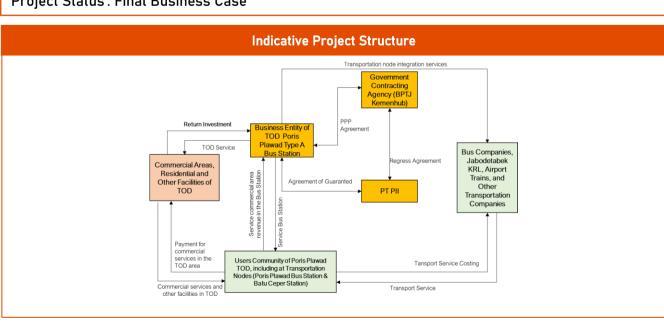
Financial Feasibility:

IRR : 14.27%

NPV: USD 12.52 Million

Estimated Concession Period: 25 years





Project Title	TOD Poris Plawad Type A Bus Station
Government Contracting Agency	Greater Jakarta Transport Authority, Ministry of
	Transportation
Implementing Agency	Ministry of Transportation
Preparation Agency	Ministry of Transportation
Project Cost	USD 71.33 Million
Estimated Concession Period	25 years
Location	Tangerang, Banten Province

1. Project Picture (Map and/or Illustration of Project)





2. The Opportunity

2.1. Project Background

Poris Plawad Type A Bus Station with a strategic location has the potential to become a Transit Oriented Development Area (TOD) listed in the Jabodetabek Transportation Master Plan (RITJ). The area will be developed as an integrated urban transportation node in the TOD Poris Plawad Type A Bus Station construction plan to create seamless and sustainable transportation. Greater Jakarta Transport Authority has also been delegated as the Government Contracting Agency through the Ministry of Transportation Decree Number 65 of 2019 concerning Delegation of Authority of the Ministry of Transportation as the Government Contracting Agency.

2.2. Project Description

The development of the Transit Oriented Development (TOD) Poris Plawad Type A Bus Station in Tangerang City, Banten Province is an initiative of the Ministry of Transportation under the Public Private Partnership (PPP) scheme. In 2021, a Preliminary Study and Outline Business Case (OBC) for the PPP Construction of TOD Poris Plawad Type A Bus Station have been carried out. The land area that can be utilized for Bus Station functions is in Greater Jakarta Transport Authority land with an area of approximately 19,000 m². In this area, an integrated area will be developed with Bus Station, Transportation Functions, Commercial, Office Rental, and Residential Functions Zones. The Business Entity implementing this project must comply with the TOD provisions stipulated in the Agrarian Affairs and Spatial Planning / National Land Agency Ministerial Regulation Number 16 of 2017 concerning and Regulation of the Head of the Greater Jakarta Transport Authority Number: PR.377/AJ.208/BPTJ-2017. The timeframe from project preparation to Financial Close is planned for 24 months. Furthermore, the construction implementation is planned for about 2 years and the PPP Project for the Construction of TOD Poris Plawad Type A Bus Station in Tangerang City, Banten Province will start operating in 2026.

2.3. Project Objectives

The objective of Transit Oriented Development (TOD) Poris Plawad Type A Bus Station project plan is to Develop an Integrated Urban Transportation System by developing Transportation nodes connected to the Main Corridor of the Mass Public Transport Network. Referring to the Jabodetabek Transportation Master Plan, integration between Poris Plawad Type A Bus Station and Batu Ceper Station is important as an Integrated Urban transportation node in the TOD Poris Plawad Type A Bus Station development plan.

3. Business Entity's Scope of Work

The scope of work for the private partner in this project are Design - Build - Finance - Operate - Maintain - Transfer (DBFOMT), which consist of:

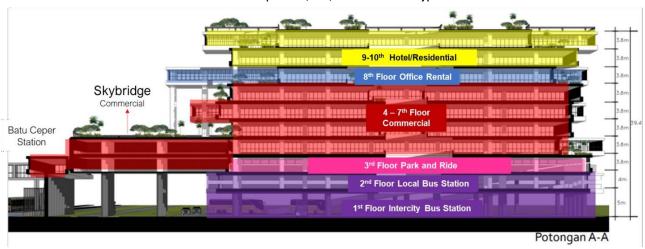
- Poris Plawad Poris Plawad Type A Bus Station Building and Land Owned by Greater Jakarta Transport Authority;
- b. Integration Building Between Poris Plawad Poris Plawad Type A Bus Station and BatuCeper station;
- C. Land Owned by the Local Government of Tangerang City as part of the Development of TOD Poris Plawad Type A Bus Station.

4. Technical Specification

Mixed-use concept implementation:

No	Mixed-use	TOD Poris Plawad Type A Bus Station
1	Intercity Bus Station	✓
2	Local Bus Station	✓
3	Park and Ride	✓
4	Commercial	✓
5	Office Rental	✓
6	Hotel/Residential	✓
7	Other	Sport Facilities, Green Building,Professional Fees

Building Development Area of Transit Oriented Development (TOD) Poris Plawad Type A Bus Station



Area Of **Every Floor**

1st Floor $9.600 \, m^2$

2nd Floor

4-7th Floor 40.775 m² 10th Floor $5.716 \, \text{m}^2$

 $8.300 \, m^2$

8th Floor $6.788 \, \text{m}^2$ Sky Bridge $1.300 \, \text{m}^2$

3rd Floor 9th Floor : 7.185 m² $9.600 \, \text{m}^2$ Green Area $: 35.748 \, m^2$

Building Type	Mix-Use Building
Number of Floors	10
Building Area	19,000 M ²
Building Function	Intercity Bus Station, Local Bus Station,Park and Ride, Commercial, Office Rental, Hotel/Residential

5. **Environmental Impact Assessment (EIA/AMDAL) Findings**

Transit Oriented Development (TOD) Poris Plawad Type A Bus Station project in Tangerang City, Banten Province is categorized as business activities that are required to have an EIA/AMDAL. The Ministry of Transportation will prepare an EIA/AMDAL document for this project.

6. Land Acquisition and Resettlement Action Plan

Land acquisition does not need to be done, because the land to be developed is already owned by Greater Jakarta Transport Authority Ministry of Transportation as Government Contracting Agency.

7. **Project Cost Structure**

Estimated Project Cost	USD 71.33 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	14.27%
NPV	USD 12.52 Million

8. Government Support and Guarantee

Government support and guarantee will be identified during FBC preparation.

9. Contact Information

Name : Rachmat Susilo

Position: Head of Infrastructure Integration Sub-directorate,

Directorate of Infrastructure, Greater Jakarta Transport Authority

Ministry of Transportation

Phone : +62 822-8218-1036

Email : rachmatsoes ito 09@gmail.com



Betan Subing Type A Bus Terminal Development

Location: Betan Subing, Lampung Province



Government Contracting Agency:

Minister of Transportation Handed over to the Director General of Land Transportation

Type of PPP:

Solicited

Return of Investment:

Other Form

Sub-Sector: Passenger Terminal

Description:

The Betan Subing terminal is strategically located near the Trans Sumatra toll road, offering convenient access for travelers. For those reaching the terminal from arterial roads or non-toll roads, there is also a connection available through the national road. Additionally, the presence of the Terbanggi Besar toll gate provides further accessibility to the Betan Subing terminal. By developing a modern and well-equipped Type A Bus Terminal at Betan Subing, the Ministry of Transportation aims to enhance the overall transportation experience and facilitate smoother travel for passengers in the Lampung Province.

Estimated Project Cost: USD 16.22 Million

Financial Feasibility:

IRR : 13.9% (with charge applies to the bus

and passengers)

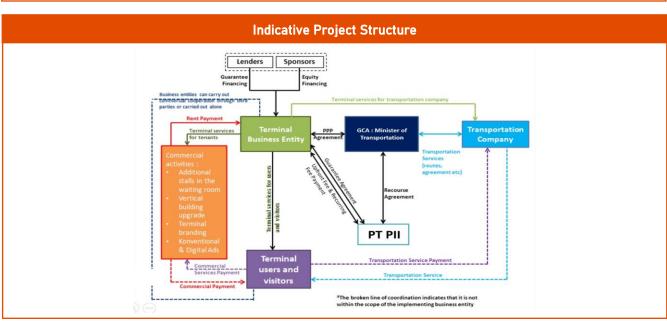
11.9% (without charge applies to the bus

and passangers)

NPV : USD 4.12 Million

Estimated Concession Period: 30 years





Project Title	Betan Subing Type A Bus Terminal Development
Government Contracting Agency	Minister of Transportation
Implementing Agency	Directorate General of Land Transportation
Preparation Agency	Ministry of Transportation
Project Cost	USD 16.22 Million
Estimated Concession Period	30 years
Location	Central Lampung Regency, Lampung Province

1. Project Picture (Map and/or Illustration of Project)











2. The Opportunity

2.1. Project Background

In the National Medium-Term Development Plan 2020-2024 (Presidential Regulation No. 18/2020) it is mandated that the Government needs to encourage public participation, including the private sector and local governments in the service and implementation of the facilities and infrastructure sector. The Ministry of Transportation as the person in charge of the transportation sector, including land transportation, describes the government's plan using the Public-Private Partnership (PPP) scheme. The Corona Virus 19 (Covid-19) pandemic at the beginning of 2020 was contributing to the further suppressed of funding needs for the infrastructure development. Thus, PPP scheme became one of the alternative funding options to build, operate and maintain infrastructure facilities at the Ministry of Transportation.

Through Presidential Regulation No. 38 of 2015 concerning Procedures for Implementing Government Cooperation with Business Entities in the Provision of Infrastructure, regulates sectors that can provide economic and social infrastructure services, including land transportation, specifically terminals.

Based on the Regulation of the Minister of Transportation No. 24 of 2021 concerning the Operation of Road Transport Passenger Terminals, the person in charge of the type A passenger terminal service is the Minister of Transportation / Director General of Land Transportation. The operation of type A terminals that are spread throughout Indonesia has varying conditions so that they are also divided into several classes. In terms of the development of the type A Terminal PPP project, the Ministry of Transportation as the GCA has chosen the Betan Subing Terminal located in Central Lampung Regency, Lampung Province to be developed as one of the pilot PPP projects in the type A terminal.

2.2. Project Description

The development of the Type A Betan Subing Terminal in Lampung Province was initiated by the Ministry of Transportation. In 2020, a Preliminary Study on the Development of a Type A Terminal in Lampung Province has been conducted. Of the three candidate type A terminals in Lampung Province, the Betan Subing type A terminal in Central Lampung was selected to be developed under the PPP scheme.

The development of the Type A Betan Subing Terminal in Lampung Province was planned in the form of activities to build and operate a terminal with a building area of around 15,900 m² of terminal building and mixed-use as well as attracting development around the terminal to increase crowds and generate new transportation. This project gets a terminal financing refund from the services regulated in the Minister of Transportation Regulation No. 24 of 2021. Business Entities Implementing this project are required to achieve the Minimum Service Standards regulated in the Minister of Transportation Regulation No. 40 of 2015 and the director general of land transportation Regulation No. KP722 / AJ.005 / DRJD.2021. The project preparation period up to financial close is planned for 24 (twenty-four) months. Furthermore, the construction implementation is planned for about 1 year and it is estimated in 2025, the Government and Business Entity Cooperation Project for the Development of the Type A Betan Subing Terminal in Lampung Province has started operating.

2.3. Project Objectives

The Development of Type A Betan Subing Terminal in Lampung Province aims to:

- 1. Create a terminal with a modern concept, safe and comfortable,
- 2. Supporting the Ministry of Transportation program in creating a mixed-use-based terminal service,
- 3. To improve transportation access to and from Central Lampung Regency,
- Become a locomotive for driving the economy and development of Central Lampung Regency through a mixeduse terminal scheme.
- 5. Generating public interest to visit the terminal and to use public transportation, especially city bus.

3. Business Entity's Scope of Work

The scope of work for the private partner in this project are Design, Build, Finance, Maintenance, Operate, Transfer (DBFMOT).

4. Technical Specification

Building Type	Multi-storey Building Complex
Number of Floors	2
Building Area	15.900 M ²
Building Function	Hotel, Grocery Center and Recreation (Sport)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The Betan Subing Type A Bus Terminal Development in Lampung Province is categorized as business activities that are required to have an EIA/AMDAL. The Ministry of Transportation will prepare an EIA/AMDAL document for this project.

6. Land Acquisition and Resettlement Action Plan

The land area of Betan Subing Terminal is already owned by the Ministry of Transportation with an area of \pm 5.5 Ha. Based on the Outline Business Case, there is a need for land area for the terminal (2.27 Ha and 1.36 Ha) so that the total area becomes 9.2 Ha for additional mixed-use activities. Regarding this additional area, it is still under discussion between the Central Lampung Regency Government and the Ministry of Transportation, in this case through the Directorate General of Land Transportation.

7. Project Cost Structure

Estimated Project Cost	USD 16.22 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	13.9% (with charge applies to the bus and passengers)
	11.9% (without charge applies to the bus and passengers)
NPV	USD 4.12 Million

8. Government Support and Guarantee

Based on OBC study, this project is indicated to required Government Support up to 27.5% and government guarantees. The Ministry of Transportation will confirm further in the final pre-feasibility study/Final Business Case (FBC).

9. Contact Information

Name : Susanty Pertiwi

Position: Head of Infrastructure and Business Sub-directorate,

Directorate of Road Transportation Infrastructure, Directorate General of Land Transportation

Phone : +62812 9486011

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Purabaya Type A Bus Terminal Development

Location: Sidoarjo, East Java Province

Sector: Transportation



Government Contracting Agency:

Minister of Transportation handed over to the Director General of Land Transportation

Type of PPP:

Solicited

Return of Investment:

Other Form

Sub-Sector: Passenger Terminal

Description:

To improve the quality of the terminal to provide better transportation service, the Ministry of the Transportation is planning to develop Purabaya Type A Bus Terminal at Sidoarjo, East Java Province through Public-Private Partnership Scheme. The development of this terminal drives an increase in transportation access and economic development through a mixed-use terminal scheme.

Estimated Project Cost: USD 23.65 Million

Financial Feasibility:

IRR : 12%

NPV : USD 4.93 Million

Estimated Concession Period: 20 years

Indicative Project Schedule

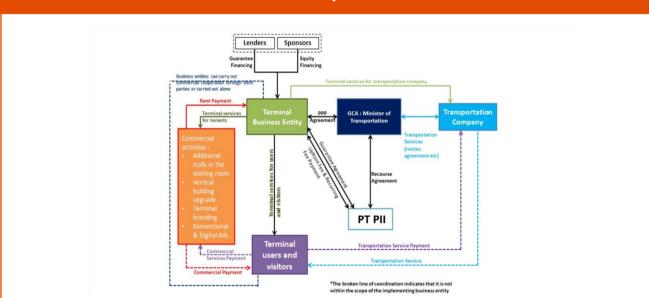
Pre-Qualification Q1 2024 Request for Proposal Q2 2024

Bid Award Q3 2024 Agreement Signing Q3 2024 Financial Close Q1 2025

Construction Q3 2025

Project Status: Outline Business Case

Indicative Project Structure



Project Title	Purabaya Type A Bus Terminal Development
Government Contracting Agency	Minister of Transportation
Implementing Agency	Directorate General of Land Transportation
Preparation Agency	Ministry of Transportation
Project Cost	USD 23.65 Million
Estimated Concession Period	20 years
Location	Sidoarjo, East Java Province

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

To improve the quality of the terminal as well as to provide better transportation service, the Ministry of Transportation has planned to develop Purabaya Type A Bus Terminal at Sidoarjo, East Java Province through Public-Private Partnership Scheme. The development of this terminal can encourage increased transportation access and economic development through mixed-use terminal scheme.

2.2. Project Description

The development of the Purabaya Type A Terminal in East Java Province is an initiative of the Ministry of Transportation. In 2020, a Preliminary Study of Type A Terminal Development in East Java Province has been conducted. Out of all the four candidates for type A terminals in East Java province, The Purabaya type A terminal in Sidoarjo district was selected to be developed under the PPP scheme. The development of the Purabaya Type A

Terminal in East Java Province is planned in the form of activities to build and operate a terminal with a building area of approximately 34,349 m² which consists of terminal and mixed - use buildings. This project obtains a source of terminal financing from services regulated in Minister of Transportation Regulation No. 24/2021. Implementing Business Entity for this project are required to achieve the Minimum Service Standards regulated in the Minister of Transportation Regulation No. 40/2015 and General Director of Air Transportation Regulation No. KP722/AJ.005/DRJD.2021. The starting period of project preparation until Financial Close is planned for 24 months. Furthermore, the construction implementation is planned for about 1 year and the PPP Project for Purabaya Type A Terminal Development in East Java Province will start operating in 2025.

2.3. Project Objectives

The objectives of Purabaya Type A Bus Terminal Development project plan is to improve the quality of infrastructure terminal in providing services especially in achieving security and comfort aspects for users. In addition, the development of this terminal can improve transportation access and economic development through mixed-use terminal scheme.

3. Business Entity's Scope of Work

The scope of work for the private partner in this project are Design, Build, Finance, Maintenance, Operate, Transfer (DBFMOT), which consist of :

- Design, funding, and construction of new buildings (mixed use) and supporting infrastructure
- b. Design, funding, and terminal construction including terminal facilities
- c. Terminal facility service operations
- d. Terminal maintenance (buildings, parking area, etc)
- e. Payment for electricity, Local Water Company, and provision of fuel for terminal operations
- f. Operational management of mixed use and old buildings
- g. Operation of mixed-use services and old buildings Operation and maintenance of new buildings (mixed use) and old buildings
- h. Operation and maintenance of new building infrastructure (mixed use) and old building (electric generator, WWTP, clean water system, and others)
- i. Payment of electricity, Local Water Company, and provision of fuel for new buildings (mixed use) and old buildings

4. Technical Specification

Mixed-use concept implementation:

No	Mixed-use	Purabaya Terminal
1	Hotel & Business Center	✓
2	Shopping Center	✓
3	Restaurant/Café	✓
4	Reflexy	✓
5	Other	Fun, Tourism, Unique Sport/Spot

Building Development Area of Purabaya Bus Terminal

	Number of Floors with Commercial Rent	Building Position	Typical Area (m2)	Rentable Area (m2)
Entrance Hall & Commercial Building	2 floors	Old entrance UMKM area	5,505	4,588
Office-Hotel Building	7 floors	Office tower building	4,734	4,104
Parking Building (Car)	4 floors	Located on the west side of main building	9,720	9,720
Sky Bridge Building	2 floors	Pedestrian corridor at parking area to drop off area	894	427
Parking Building (Motorcycle)	1 floor	Located on the west side of main building	1,600	1,600
Bus drivers & crews accommodation	2 floors		1,550	540
Bank sampah building	1 floor		360	360
Cargo Terminal	1 floor		1,296	576
Mobile SME/ UMKM space	1 floor		2,444	2,444
Existing waiting room	2 floors		974	974
Total Rentable Area 25			25,333	
Building Type Multi-storey Building Complex			1	
Number of Floors	7			
Building Area	Building Area 34,349 M2			
Building Function Hotel, Business & Shopping Center, Restaurant, Parking Area.				

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The project of Purabaya Type A Bus Terminal Development in East Java Province is categorized as business activities that are required to have an EIA/AMDAL. The Ministry of Transportation will prepare an EIA/AMDAL document for this project.

6. Land Acquisition and Resettlement Action Plan

Land acquisition has been carried out by the Ministry of Transportation.

7. Project Cost Structure

Estimated Project Cost	USD 23.65 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	12%
NPV	USD 4.93 Million

8. Government Support and Guarantee

Government support and guarantees will be determined in Final Business Case (FBC).

9. Contact Information

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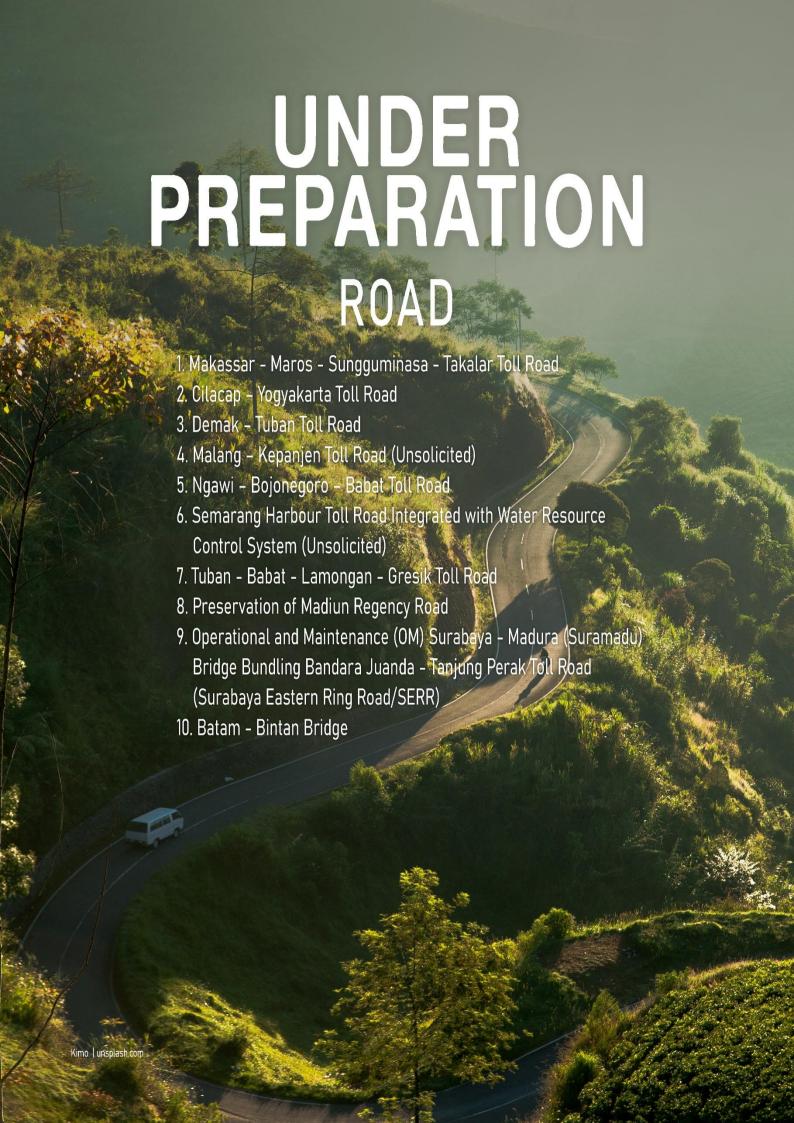
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Transportation

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Makassar-Maros-Sungguminasa-Takalar Toll Road

Location: South Sulawesi Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

Under Review

Sub-Sector: Toll Road

Description:

The project entails the construction of a Mamminasata toll road. spanning approximately 48 km. This toll road will establish a direct connection between Maros Sub-district and Takalar Sub-district. bypassing Makassar City. It is expected to significantly reduce the logistics distance between these two regions. The Mamminasata Toll Road is designed to feature four trumpettype interchanges.

Estimated Project Cost: USD 722.21 Million

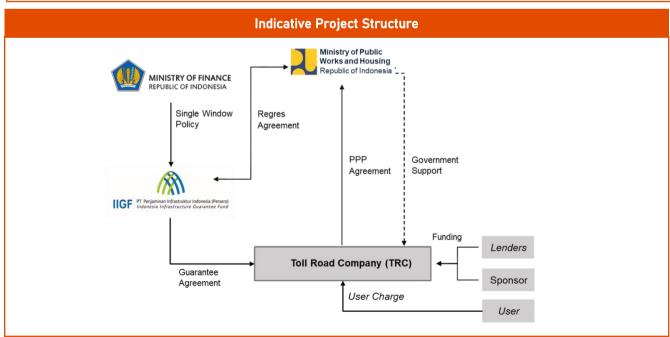
Financial Feasibility:

IRR : 11.28%

NPV: USD 78.93 Million

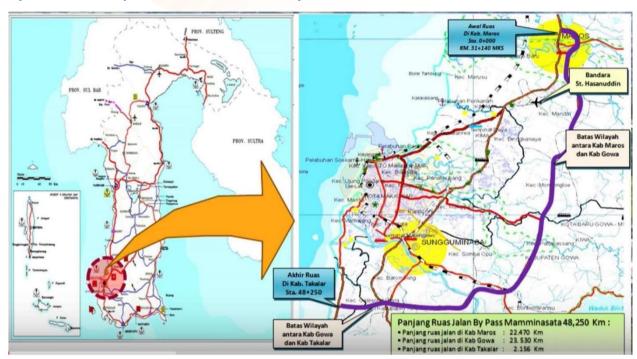
Estimated Concession Period: 50 years





Project Title	Makassar-Maros-Sungguminasa-Takalar Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Agency	Indonesia Toll Road Authority (BPJT)
Preparation Agency	Indonesia Toll Road Authority (BPJT)
Project Cost	USD 722.21 Million
Estimated Concession Period	50 Years
Location	South Sulawesi Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Maps of Mamminasata Toll Road

2. The Opportunity

2.1. Project Background

The Mamminasata Bypass Road (approximately 48 Km) has begun construction since 2015 and is still constrained by several things, one of which is land availability. Therefore, there is a plan to raise the status of this road to be a toll road in order to accelerate its development and the PPP scheme is expected to be a solution.

This Toll Road will connect Maros Sub-district and Takalar Sub-district without passing through Makassar City, will shorten the logistics path between the two regions, so that it will have a positive impact on the economies of both regions.

2.2. Project Description

Mamminasata is an urban area consisting of Makassar, Maros, Sungguminasa, and Takalar. This Toll Road will connect Maros Sub-district and Takalar Sub-district without passing through Makassar City. It is planned to have four trumpet-type interchanges.

2.3. Project Objectives

The objectives of Mamminasata Toll Road are as follows:

- To shorten the logistics path between Maros Sub-district and Takalar Sub-district;
- 2. To increase the economy in both Maros Sub-district and Takalar Sub-district; and
- 3. To support the traffic flow in Makassar City.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT)

Business entity shall be responsible to perform the toll road project, including design, construction, finance, operation, maintenance during the concession period, and transferring the asset to the government at the end of the concession period.

4. Technical Specification

The length of this toll road is 48.123 km. The technical specifications for toll roads will refer to Minister of Public Works and Housing Regulation Number 19 Year 2011. Some technical specifications include:

- 1. Design speed
- 2. Number of Lane
- 3. Lane Width
- 4. Outer Shoulder Width
- 5. Inner Shoulder Width
- 6. Median Width

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The documents will be prepared by the Government Contracting Agency.

6. Land Acquisition and Resettlement Action Plan

The information related to the land acquisition and resettlement planned to be provided in subsequent studies.

7. Project Cost Structure

Estimated Project Cost	USD 722.21 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	78.97 Million
NPV	11.28%

8. Government Support and Guarantee

Outline business case study indicates possible business model options, which are user charge with government support or availability payment (AP). The government support identified in this OBC study are Viability gap fund (VGF) and construction support from the Ministry of Public Works and Housing. The business model selected and the need for government support shall be provided in subsequent studies.

9. Contact Information

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Cilacap - Yogyakarta Toll Road

Location: Central Java Provinces

Sector: Road



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project aims to construct a 121.75 km toll road connecting Cilacap and Yogyakarta, completing the toll road network in the south of Central Java Province. This infrastructure development is expected to stimulate growth in the central-south region, leveraging its various potentials. The toll road will commence from the endpoint of the Gedebage-Tasikmalaya-Cilacap Toll Road and feature 6 interchanges. Additionally, there will be 1 on/off ramp at the end section, connecting to the NYIA-Yogyakarta-Solo Toll Road.

Estimated Project Cost: USD 3.379,05 Million

Financial Feasibility:

IRR : 11.10%

NPV : USD 17.77 Million

Estimated Concession Period: 50 years

Indicative Project Schedule



Indicative Project Structure

Project Status: Final Business Case and Readiness Criteria

Agreement

Minister of Public Works and Housing Republic of Indonesia Regress Agreement ppp Agreement Funding Lenders Toll Road Company (TRC) Guarantee Sponsor

User Based Payment

User

Project Title	Cilacap-Yogyakarta Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Unit	Indonesia Toll Road Authority (BPJT)
Preparation Agency	1. Directorat General of Highway, MPWH
	2. Directorat General of Infrastructure
	Financing, MPWH
Project Cost	USD 3.379,05Million
Estimated Concession Period	50 Years
Location	Central Java Province

1. Project Picture (Map and/or Illustration of Project)





Picture 1 - Cilacap-Yogyakarta Toll Road Route

2. The Opportunity

2.1. Project Background

Cilacap-Yogyakarta Toll Road will be connected to Gedebage-Tasikmalaya-Cilacap Toll Road and NYIA-Yogyakarta-Solo Toll Road, aimed to stimulate growth in the central-south region with its various potentials.

Cilacap-Yogyakarta Toll Road is mentioned in article 20B in Regional Regulation of Central Java Province Number 16 of 2019 about Spatial Plan of Central Java Province. In addition to Presidential Regulation Number 79 of 2019, Cilacap Regency also is a part of Barlingmascakeb Regional Development which become one of the area aimed to support the acceleration of economic development in Central Java.

2.2. Project Description

Cilacap-Yogyakarta Toll Road are in the administrative area of Central Java Provinces. It is planned to have ± 121.75 km length and will connect two provinces. Based on traffic analysis in FBC, the traffic volume is estimated 10.821 vehicles/day in the first year of operation and will become around 85.500 vehicles/day in final consession period (50 years). This toll road is equipped with 6 interchanges and 1 on/off ramp.

2.3. Project Objectives

The objectives of Cilacap-Yogyakarta Toll Road are as follows:

- To complete the toll road network in south region of Java Island
- To support the implementation of Presidential Regulation Number 79/2019;
- To stimulate the growth in the central-south region Java Island
- To increase the development of the area traversed by the toll road; and
- To support the regional economic growth.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT).

The business entity is responsible for the implementation of the toll road project, with the scope of the PPP portion of construction, finance, operation, and maintenance all toll road segments during the concession period.

4. Technical Specification

The technical specifications for Cilacap-Yogyakarta Toll Road are as follows:

No	Facilities	Сара	city
1	Length	121.75 km	
2	Design Speed	100 kr	n/hr
3	Number of Lane	2x	2
4	Lane Width	3.60 m	
5	Outer Shoulder Width	3.00 m	
6	Inner Shoulder Width	1.50 m	
7	Median Width (including inner shoulder)	5.50 m	
8	Interchange/Junction	Starting Point at	IC Kebumen
	-	Cilacap	IC Kutoarjo
		IC Maos	IC Purworejo
		IC Soempioeh	On/Off Ramp Kulon
		IC Gombong	Progo

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, AMDAL study will be conducted during Q2 2022 - Q4 2022.

6. Land Acquisition and Resettlement Action Plan

Land Acquisition plans have been made with a cost of approximately USD 261.98 Million.

7. Project Cost Structure

Estimated Project Cost	USD 3.379,05 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11.10%
NPV	USD 17.77 Million

8. Government Support and Guarantee

The Final Business Case of the project indicates the need for government supports in terms of land acquisition. Government guarantee through PT PII will also be necessary.

9. Contact Information

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Demak - Tuban Toll Road

Location: Central Java Province and East Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project involves the construction of a 179.55 km toll road connecting Demak and Tuban, which aims to support Presidential Regulation Number 79/2019 and Presidential Regulation Number 80/2019, while fostering economic and regional growth. This toll road will feature 7 interchanges and 1 junction, enhancing connectivity and accessibility in the area.

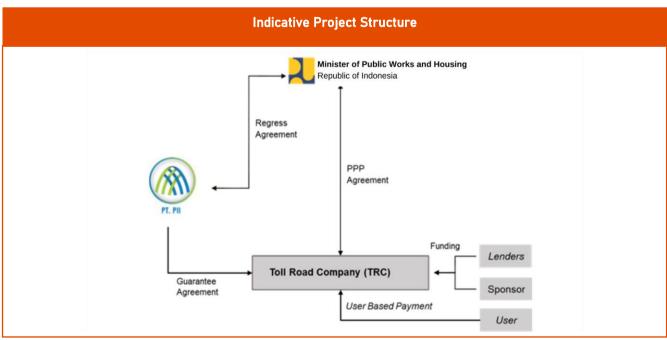
Estimated Project Cost: USD 3.440,27 Million *before Government support

Financial Feasibility:

IRR : 11% NPV : 0

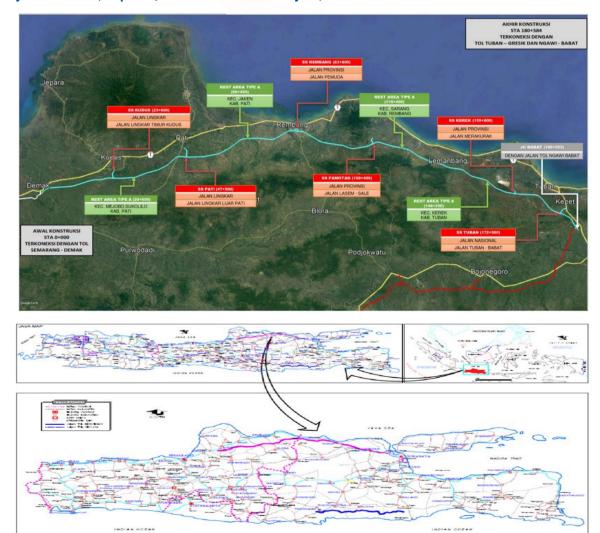
Estimated Concession Period: 50 years





Project Title	Demak-Tuban Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Unit	Indonesia Toll Road Authority (BPJT)
Preparation Agency	 Directorat General of Highway, MPWH
	2. Directorat General of Infrastructure
	Financing, MPWH
Project Cost	USD 3.440,27 Million
	*before Government support
Estimated Concession Period	50 Years
Location	Central Java Province and East Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Demak-Tuban Toll Road Route

2. The Opportunity

2.1. Project Background

Demak-Tuban Toll Road is the continuation of Semarang-Demak Toll Road, the planned Ngawi-Bojonegoro-Babat Toll Road, and the planned Tuban-Gresik Toll Road. The existence of this toll road will eliminate the missing link for north side of the trans java toll road network. Demak-Tuban Toll Road will support Presidential Regulation Number 79/2019 and Presidential Regulation Number 80/2019.

2.2. Project Description

Demak-Tuban Toll Road is in the administrative area of Central Java Province and East Java Province which connect Demak Regency and Tuban Regency. This toll road is equipped with 6 interchanges and 1 junction. Demak-Tuban Toll Road will be constructed in two stages, the first stages included Section 1,2,3,7 and constructed in 2026 (total length 93 Km) while the rest (87 Km, Section 4,5,6) will be constructed in 2030.

2.3. Project Objectives

The objectives of Demak-Tuban Toll Road are as follows:

- To support the implementation of Presidential Regulation Number 79/2019;
- To support the implementation of Presidential Regulation Number 80/2019;
- To complete the toll road network of north side trans java;
- To increase the development of areas that are passed by toll roads; and
- To support the regional economic growth.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

Business entities shall be responsible to perform the toll road project, including design, financing, construction, operation, and maintenance during the concession period.

4. Technical Specification

The technical specifications for Demak-Tuban Toll Road are as follows:

No	Facilities	Capacity	
1	Length	179.55 km	
2	Design Speed	100 km/hr	
3	Number of Lane Initial Stage	2x2	
4	Number of Lane Final Stage	2x3	
5	Lane Width	3.60 m	
6	Outer Shoulder Width	3.00 m	
7	Inner Shoulder Width	1.50 m	
8	Median Width (including inner shoulder)	5.50 m	
9	Interchange	1. IC Kudus	
		2. IC Pati	
		3. IC Rembang	
		4. IC Pamotan	
		5. IC Kerek	
		6. IC Tuban	
		7. JC Babat	

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, AMDAL study will be conducted during Q2 2022 - Q1 2023.

6. Land Acquisition and Resettlement Action Plan

Land Acquisition plans have been made with a cost of approximately USD 315.79 Million.

7. Project Cost Structure

Estimated Project Cost	USD 3.440,27 Million *before Government support
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11%
NPV	0

8. Government Support and Guarantee

The feasibility study of the project indicates the need for government support in terms of land acquisition and SBOT 1,1% (IDR 395 M). Government guarantee through the Indonesia Infrastructure Guarantee Fund (IIGF) will also be necessary.

9. Contact Information

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Malang - Kepanjen Toll Road

Location: East Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project is to construct a ±29.787 km toll road of Malang-Kepanjen which is expected to overcome traffic problems and boost economic and regional growth. This toll road is equipped with 2 junctions and 4 interchanges.

Estimated Project Cost: USD 726.91 Million

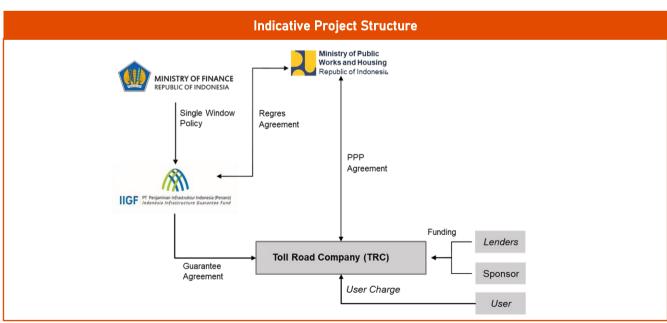
Financial Feasibility:

IRR : 9.69%

NPV: USD 87.67 Million

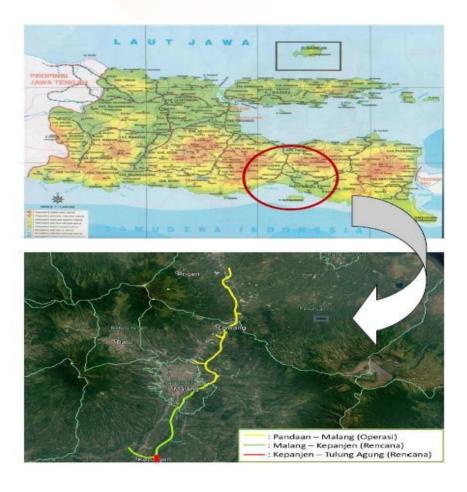
Estimated Concession Period: 45 years





Project Title	Construction of Malang – Kepanjen Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Agency	Indonesia Toll Road Authority (BPJT)
Preparation Agency	PT. PP (Persero) Tbk
Project Cost	USD 726.91 Million
Estimated Concession Period	45 years
Location	East Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Malang - Kepanjen Toll Road

2. The Opportunity

2.1. Project Background

Malang-Kepanjen Toll Road is a continuation of Pandaan-Malang Toll Road. It will become an alternative road from Malang City to Kepanjen District in East Java Province to support acceleration growth in the tourism and industrial sectors.

2.2. Project Description

Malang-Kepanjen Toll Road is located in the administrative area of East Java Province which connects Malang City and Malang Regency, 6 Districts, and 17 Villages. Malang-Kepanjen Toll Road has a length ±29.787 km. It is one of the projects that have been listed in Presidential Regulation Number 80/2019. Based on the analysis in 2026, the volume of traffic is 23.692 vehicles/day. It is estimated to increase to 158.936 vehicles/day in 2067. This toll road is equipped with 2 junctions and 4 interchanges. Malang-Kepanjen Toll Road is planned to operate in 2026.

2.3. Project Objectives

The objectives of Malang-Kepanjen Toll Road are as follows:

- To support the implementation of Presidential Regulation Number 80/2019;
- To improve accessibility in Southern East Java Province;
- To increase the development of areas that are passed by toll roads; and
- To support increasing regional economic growth.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

The business entity shall be responsible to perform the toll road project, including financing, construction, operation, and maintenance during the concession period.

4. Technical Specification

The technical specifications for Malang - Kepanjen Toll Road are as follows:

No	Facilities Facilities	Capacity
1	Length	±29.787 km
2	Design Speed	80 km/hr
3	Number of Lane	2x2x3.60
4	Lane Width	3.60 m
5	Outer Shoulder Width	3.00 m
6	Inner Shoulder Width	1.50 m
7	Median Width (including inner shoulder)	5.50 m

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, the AMDAL study will be conducted in 2022.

6. Land Acquisition and Resettlement Action Plan

Land Acquisition plan has been prepared with a cost approximately USD 212.22 Million.

7. Project Cost Structure

Estimated Project Cost	USD 726.91 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	9.69%
NPV	USD 87.67 Million

8. Government Support and Guarantee

The feasibility study of the project indicates the need for government supports in terms of land acquisition process (Land Cost included in Investment Cost). Government guarantee through the Indonesia Infrastructure Guarantee Fund (IIGF) will also be necessary.

9. Contact Information

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Position : Head of Investment Plan Legalization Subdirectorate

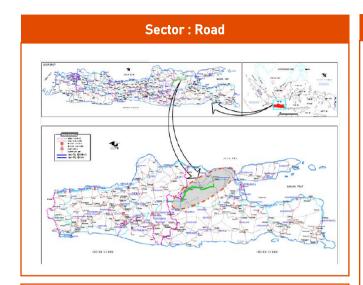
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Ngawi-Bojonegoro-Babat Toll Road

Location: East Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project involves the construction of a 106,409 km toll road known as Ngawi-Bojonegoro-Babat, which has been designated under Presidential Regulation Number 80/2019. This toll road will feature 2 junctions and 3 interchanges, and it is strategically positioned to pass through key areas such as the Gas Unitization Field Development of Jambaran-Tiung Biru in Bojonegoro Regency and the Cepu Area Block.

Estimated Project Cost: USD 2,142.51 Million

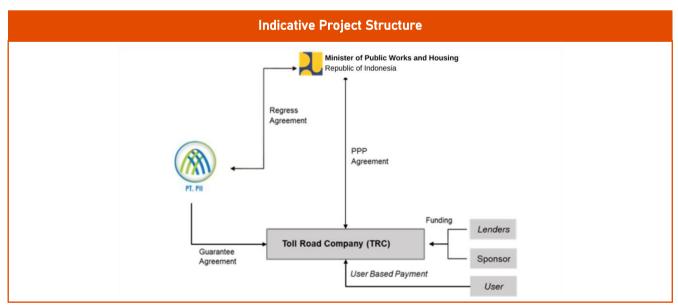
Financial Feasibility:

IRR : 11.40%

NPV : USD 56.22 Million

Estimated Concession Period: 50 years

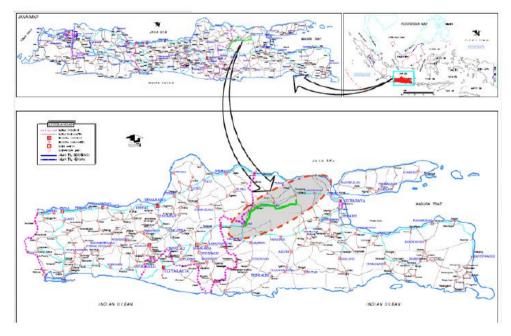
Indicative Project Schedule Request for Agreement Construction **Financial Close** Bid Award Qualification Proposal Q3 2027 - Q4 Signing Q3 2026 Q1 - Q3 2027 Q4 2026 2028 Q3-Q4 2025 Q1-Q2 2026 Project Status: Final Business Case and Readiness Criteria *) the project implementation continues after 2024



Project Title	Ngawi-Bojonegoro-Babat Toll Road
Government Contracting Agency	Minister of Public Works and Housing
Implementing Unit	Indonesia Toll Road Authority (BPJT)
Preparation Agency	Directorat General of Highway, MPWH Directorat General of Infrastructure Financing, MPWH
Project Cost	USD 2,142.51 Million
Estimated Concession Period	50 Years
Location	East Java Province

1. Project Picture (Map and/or Illustration of Proj ect)







Picture 1 - Ngawi-Bojonegoro-Babat Toll Road Route

2. The Opportunity

2.1. Project Background

Ngawi-Bojonegoro-Babat Toll Road will support the economic development of Gerbangkertosusila Area (Presidential Regulation Number 80/2019). The toll road will connect and serve The National Activity Center (PKN) of Gresik-Bangkalan-Mojokerto-Surabaya-Sidoarjo-Lamongan (Gerbangkertosusilo) and Madiun Development Area (WP). It will pass through Gas Unitization Field Development of Jambaran-Tiung Biru in Bojonegoro Regency which is one of National Strategic Projects (PSN) and Blok Cepu Area.

2.2. Project Description

Ngawi-Bojonegoro-Babat Toll Road will connect middle Trans Java Toll Road (Surabaya-Solo) in Ngawi Regency with the planned Gresik-Lamongan-Tuban Toll Road. This toll road is equipped with 2 junctions and 3 interchanges.

2.3. Project Objectives

The objectives of Ngawi-Bojonegoro-Babat Toll Road are as follows:

- To support the economic development of Gerbangkertosusila Area.
- To complete the toll road network in north East Java;
- To increase the development of areas that are passed by toll roads;

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT).

Business entities shall be responsible to perform the toll road project, including design, financing, construction, operation, and maintenance during the concession period.

4. Technical Specification

The technical specifications for Ngawi-Bojonegoro-Babat Toll Road are as follows:

No	Facilities	Capacity	
1	Length	106,409 km	
2	Design Speed	100 km/hour	
3	Number of Lane of Initial Stage	2x2	
4	Number of Lane of Final Stage	2x3	
5	Lane Width	3.60 m	
6	Outer Shoulder Width	3.00 m	
7	Inner Shoulder Width	1.50 m	
8	Median Width (including inner shoulder)	5.50 m	
9	Interchange and Junction	JC Ngawi IC Ngawi IC Cepu	IC Bojonegoro JC Babat

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, AMDAL study will be conducted during Q2 2023 - Q3 2023.

6. Land Acquisition and Resettlement Action Plan

Land Acquisition plans have been made with a cost of approximately USD 76.89 Million.

7. Project Cost Structure

Estimated Project Cost	USD 2,142.51 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11.40%
NPV	USD 56.22 Million

8. Government Support and Guarantee

The feasibility study of the project indicates the need for government supports in terms of land acquisition. Government guarantee through the Indonesia Infrastructure Guarantee Fund (IIGF) will also be necessary.

9. Contact Information

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Semarang Harbour Toll Road Integrated with Water Resource Control System

Location: Central Java Province





Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge and Right of Reclamation Area Development

Sub-Sector: Toll Road

Description:

The project is to construct \pm 20.16 km of Semarang Harbour toll road which connects Semarang-Batang Toll Road Semarang-Demak Toll Road to complete the Ring Road around the City of Semarang. This toll road will be integrated with the sea dike and retention pond in the city of Semarang. The return of investment of the sea dike comes from the development of the reclamation area given to the winner of the auction while the retention pond will be financed by the government of Semarang city and other financing schemes.

Estimated Project Cost: USD 1,298.52 Million

Financial Feasibility:

FIRR : 11.12%

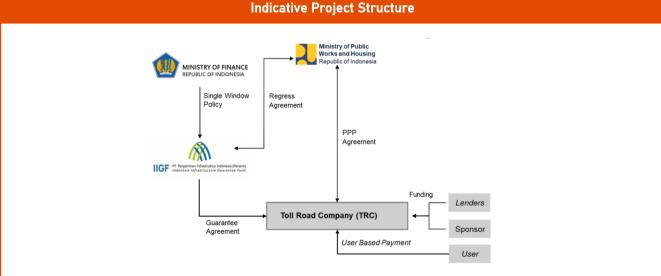
NPV : USD 6.17 Million

Estimated Concession Period: 50 years

Indicative Project Schedule

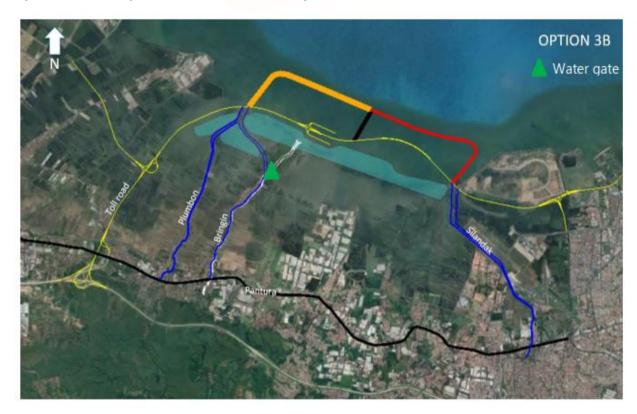


Indicative Project Structure



Project Title	Semarang Harbour Toll Road Integrated with Water Resource Control System
Government Contracting Agency	Minister of Public Works and Housing
Implementing Unit	Indonesia Toll Road Authority (BPJT)
Preparation Agency	The Consortium of PT. Sumber Mitra Jaya and PT. Waskita Toll Road
Project Cost	USD 1,298.52 Million (For Land Cost, Toll Road, and Sea Dike Construction)
Estimated Concession Period	50 years
Location	Central Java

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Project Maps

2. The Opportunity

2.1. Project Background

Economic growth in the Semarang area had an impact on regional development and travel demand growth in recent years. The road network in the Semarang region also shows a declining performance. In addition, the existence of the Trans Java Toll Road will also increase the traffic load on the road network significantly. This condition indicates the need to develop a new road network to respond to the high growth in travel demand in the Semarang and surrounding areas. Therefore, the Semarang Harbour Toll Road Development Plan has been prepared. This toll road is planned to be circular on the northern side of Semarang City, from Kaliwungu, Ahmad Yani Airport, and Tanjung Mas Port.

2.2. Project Description

Semarang Harbour Toll Road will connect the Semarang - Batang Toll Road (SBTR) to complete the Ring Road around the City of Semarang. The Semarang Harbour Toll Road is projected to benefit the Semarang City and the surrounding area, because this toll road network is connected to several vital areas around Semarang, especially

Kendal's Industrial Zone (KIK), Ahmad Yani Airport, Tanjung Mas Port, and Semarang Toll Road Section A, B, C. This toll road will also be integrated with the sea dike and retention pond in the Semarang City.

The Semarang Harbour Toll Road starts from Kaliwungu Area of Kendal Regency which connecting the Semarang Batang Toll Road and the Semarang Harbour Toll Road, then ends at Kaligawe of Semarang City which connecting Semarang Demak Toll Road and Semarang Harbour Toll Road.

The length of the Semarang Harbour Toll Road is 20.16 km which is divided into:

- Section 1: JC Kaliwungu- IC KIK (2,71 Km)
- Section 2: IC KIK On Off Airport (10.71 Km)
- Section 3: On Off Airport section On Off Tanjung Mas 1 (3,98 Km)
- Section 4: On Off Tanjung Mas 1 JC Kaligawe (2,76 Km)

This project is proposed to use a PPP scheme with user charge and the other form of investment return which is right of reclamation area development. The toll road will be operating with a closed toll collection system. The return of investment of the sea dike comes from the development of the reclamation area given to the sponsor (tender winner) while the retention pond will be financed by Government of Semarang City.

2.3. Project Objectives

- To overcome the current traffic jams in the road network in the Semarang region;
- Integrated with sea wall as a solution of abrasion in the north coast region; and
- Provision of raw water for the Semarang City.

3. Business Entity's Scope of Work

The scope of work for the business entity will be Design-Build-Finance-Operate - Maintain and Transfer (D-B-F-O-M-T) that could be elaborated as follow:

- Finance Land Cost of Toll Road
- Design-Build-Finance-Operate-Maintain and Transfer of Toll Road;
- Design-Build-Finance and Transfer of Sea Dike;
- Design of Retention Pond as a derivative responsibility to design the integrated infrastructure system.

4. Technical Specification

A business entity is required to meet the minimum toll road service standard as stipulated in Minister of Public Works Regulation No. 16/PRT/M /2014 concerning Toll Road Minimum Service Standards. Minimum toll service standards include the following service substances: toll road conditions, average travel speed, accessibility, mobility, safety, rescue unit and service assistance, environment, and rest area and rest area and service.

The technical specifications for toll roads will refer to all regulations and specifications that apply in Indonesia, such as regulations and codes issued by the Directorate General of Highways, Indonesian National Standard (SNI), and other regulations. Some technical specifications for the main road including:

No	Facilities	Capacity
1	Length	20.16 km
2	Design Speed	80 Km/hr
3	Number of Lane	2 x2 (initial stage)
		3 x3 (final stage)
4	Lane Width	3.6 m
5	Outside Shoulder Width	3.0 m
6	Inner side Shoulder Width	1.5 m
7	Design Speed	80 Km/hr
8	Median Width (include inner side	5.5 m
	shoulder)	
9	Cross slope	2%
10	Shoulder slope	2%

The technical specifications for dyke and retention polder will refer to all regulations and specifications that apply in Indonesia, such as regulations and codes issued by the Directorate General of Water Resources, Indonesian National Standard (SNI), and other regulations.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

This study indicates the need for Environmental Impact Assessment (EIA/AMDAL). The preliminary EIA document is already prepared and based on scope of works, the EIA study will be prepared by SPV/Toll Road Company.

6. Land Acquisition and Resettlement Action Plan

For the unsolicited toll road project, the land acquisition and resettlement action financed by the Business Entity will be calculated as part of the investment.

7. Project Cost Structure

Estimated Project Cost	USD 1,298.52 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11.12%
NPV	USD 6.17 Million

8. Government Support and Guarantee

The Government Support will be needed to support land acquisition process (part of Land Cost included in Investment Cost). This project will be proposed to obtain Government Guarantee by Indonesia Infrastructure Guarantee Fund (IIGF).

9. Contact Information

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Tuban-Babat-Lamongan-Gresik Toll Road

Location: East Java Province



Government Contracting Agency:

Ministry of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

Tuban - Babat - Lamongan - Gresik toll road will form a crucial linkage along the northern coast of Java Island, connecting Surabaya, Semarang, and Jakarta. The primary purpose of this toll road is to enhance accessibility, particularly for PT Pertamina Rosneft's Tuban Oil Refinery development plan and the Gresik Special Economic Zone (SEZ).

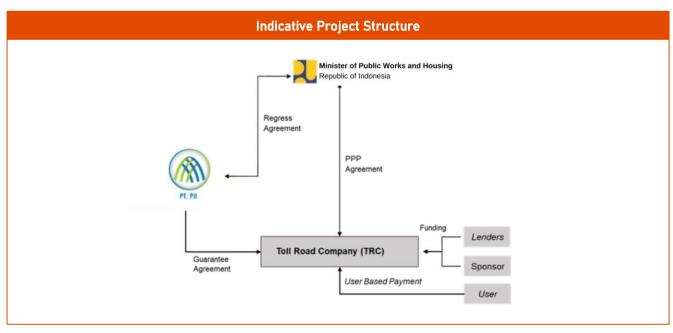
Estimated Project Cost: USD 1,618.08 Million

Financial Feasibility:

IRR : 11% NPV : 0

Estimated Concession Period: 50 years





Project Title	Tuban-Babat-Lamongan-Gresik Toll Road
Government Contracting Agency	Ministry of Public Works and Housing
Implementing Agency	Indonesia Toll Road Authority (BPJT)
Preparation Agency	Directorate General of Highway, MPWH Directorate General of Infractorations Financials
	Directorate General of Infrastructure Financing, MPWH
Project Cost	USD 1,618.08 Million
Estimated Concession Period	50 Years
Location	East Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Tuban-Babat-Lamongan-Gresik Toll Road Route

2. The Opportunity

2.1. Project Background

The planned toll road connected supporting cities of Surabaya, which are Tuban, Lamongan and Gresik. The planned toll road will be connected to the Demak-Tuban Toll Road plan, Ngawi-Babat Toll Road plan, and the existing Krian-Legundi-Bunder-Manyar Toll Road and Surabaya-Gresik Toll Road.

Tuban-Babat-Lamongan-Gresik Toll Road supporting Presidential Regulation Number 80 of 2019 concerning the acceleration of economic development in the Gresik-Bangkalan-Mojokerto-Surabaya-Sidoarjo-Lamongan area, the Bromo - Tengger- Semeru Area, as well as the wiles circle and southern cross area.

2.2. Project Description

Tuban-Babat-Lamongan-Gresik Toll Road length 61,97 Km (Section Tuban-Gresik 54,31 Km and including the length of Section IV Bunder-Manyar 7,7 Km). Tuban-Gresik Toll Road will be constructed in two stages, the first stages included Section 3-4 and constructed in 2026 (total length 24,62 Km) while the rest (37,35 km, Section 1-2) will be constructed in 2030.

It is in East Java Province passing through 3 regencies, Tuban regency, Lamongan regency and Gresik regency. The toll road will be connected to 2 planned toll roads and 2 existing toll roads. It would complete the connection of the toll road in Java island.

2.3. Project Objectives

The Objectives of Tuban-Babat-Lamongan-Gresik Toll Road are as follows:

- Supporting Presidential Regulation Number 80 of 2019 concerning the acceleration of economic development in the Gresik-Bangkalan-Mojokerto-Surabaya-Sidoarjo-Lamongan area, the Bromo-Tengger-Semeru Area, as well as the wiles circle and southern cross area.
- 2. Supporting accessibility of Special Economic Zone Gresik and PT Pertamina Rosneft's Tuban Oil Refinery Development Plan (Strategic National Plan)
- 3. Improving the surrounding economy and become a national level trade traffic

3. Business Entity's Scope of Work

The business entity is responsible for the implementation of the toll road project, with the scope of the PPP portion of construction, financing, operation, and maintenance of all toll road segments during the concession period.

4. Technical Specification

The technical specifications for South Tangerang Waste to Energy are as follows:

No	Facilities	Capacity
1	Length	61,97 Km (Section Tuban-Gresik 54,31 Km and
		including the length of Section IV Bunder-
		Manyar 7,7 Km)
2	Design Speed	80 Km/Hr
3	Number of Lane (initial and final stage)	2x2
4	Lane Width	3,6 m
5	Outer Shoulder Width	3 m
6	Inner Shoulder Width	1 m
7	Median Width (including inner shoulder)	4,5 m
8	Interchange/Junction	IC Babat (STA 12+275)
		IC Paciran (STA 28+050)*
		IC Lamongan (STA 37+350)
		IC Manyar (STA 53+225)
		*IC Paciran will be stage-wise constructed

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, AMDAL study will be conducted during Q4 2022-Q1 2024

6. Land Acquisition and Resettlement Action Plan

Based on the planned schedule, LARP study will be conducted during Q4 2022 - Q4 2023.

7. Project Cost Structure

Estimated Project Cost	USD 1,618.08 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11%
NPV	0

8. Government Support and Guarantee

The feasibility study of the project indicates the need for government support in terms of land acquisition (IDR 3,323 Trillion or USD 219,93 Million) and SBOT (IDR 383 Million or USD 25,349 Million). Government guarantee through the Indonesia Infrastructure Guarantee Fund (IIGF) will also be necessary.

9. Contact Information

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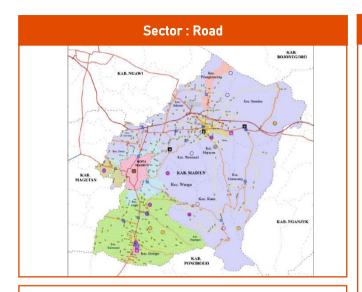
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Preservation of Madiun Regency Road

Location: Madiun Regency, East Java Province



Government Contracting Agency:

Regent of Madiun

Type of PPP:

Solicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Non-Toll Road

Description:

In order to support Presidential Regulation No. 80 of 2019 related to the Selingkar Wilis and Lingkar Selatan Priority Areas having the theme of developing agro-industry and agropolitan added value through the provision of supporting infrastructure that connects with growth centers, the Madiun Regency Government is implementing a project for Preservation of Madiun Regency Roads which is expected to improve modes of transportation in Madiun Regency.

Estimated Project Cost: USD 92.70 Million

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

Estimated Concession Period: Under Review

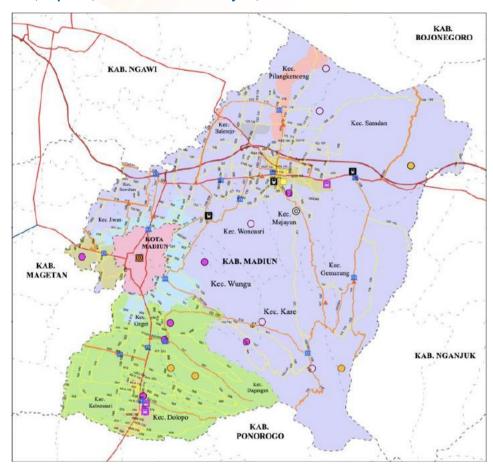


Indicative Project Structure

Project structure will be identified in OBC Report

Project Title	Preservation of Madiun Regency Road
Government Contracting Agency	Regent of Madiun
Implementing Agency	Departement of Transportation, Madiun Regency
Preparation Agency	Departement of Transportation, Madiun Regency
Project Cost	USD 92.70 Million
Estimated Concession Period	Under Review
Location	Madiun Regency, East Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Madiun District Road Map

2. The Opportunity

2.1. Project Background

Madiun Regency has a total of 743 km of roads with a total of 165 sections consisting of arterial, collector, local and environmental roads for 15 sub-districts. The road pavement on sections spread across Madiun Regency consists of Rigid/Concrete, Hotmix/Asphalt, Penetrating layers, Stone/Gravel, and Soil pavements.

Of the various types of pavements, roads are divided into 4 types of conditions, namely roads in good condition, moderate, slightly damaged, and heavily damaged. The road is in good condition and is classified as a steady road, while roads in a slightly damaged and heavily damaged condition are classified as unstable road conditions. Due to budget, technology and human resource limitations, innovation and breakthroughs are needed in road preservation using the Public Private Partnership (PPP) scheme.

2.2. Project Description

The description of this project is as follows:

Project Name : Preservation of Madiun Regency Road
Project Location : Madiun Regency, East Java Province

Project Method : Operation and Maintenance or

Reconstruction-Rehabilitation-Operation-Maintenance

Estimated Cost : Under calculation

Financing scheme : Public Private Partnership

Government Contracting Agency : Regent of Madiun Concession : Under Review

2.3. Project Objectives

The purpose of the preservation of Madiun Regency Road is:

- 1. To Improve access roads for the development of tourism areas;
- 2. To facilitate the monitoring of road Infrastructure;
- 3. To Improve the economy of Madiun District.

3. Business Entity's Scope of Work

Option 1: OM (Operate and Maintenance).

Option 2: Reconstuction - Rehabilitation - Operation - Maintenance (partially)

Option 3: Reconstuction - Rehabilitation - Operation - Maintenance

4. Technical Specification

Project technical specification will be further studied during the OBC/FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC report.

6. Land Acquisition and Resettlement Action Plan

The detailed acquisition and resettlement action plan will be will be provided in the OBC/FBC report.

7. Project Cost Structure

Estimated Project Cost	USD 92.70 Million
Indicative Debt to Equity Ratio	
- Debt Level	Under Calculation
- Equity Level	Under Calculation
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

Refers to PUPR Regulation No. 19 of 2011, the existing condition of primary collector roads in Madiun Regency still does not meet the technical requirements where the average road width only reaches 6 meters. In this regard, it is indicated that a certain amount of land acquisition will be required for road widening activities. Further studies related to land acquisition will be carried out in the OBC/FBC document.

9. Contact Information

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Operational and Maintenance (OM) Surabaya-Madura (Suramadu) Bridge Bundling with Bandara Juanda-Tanjung Perak Toll Road (Surabaya Eastern Ring Road/SERR)

Location: East Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge from SERR Toll Road

Sub-Sector: Bridge

Description:

The Suramadu Bridge, connecting Surabaya City and Madura Island (Bangkalan), holds the distinction of being the longest cable-stayed bridge in Indonesia. Spanning a length of 5,438 meters and designed for a service life of 100 years, the bridge requires ongoing operation and maintenance. There is a potential opportunity to finance the operation and maintenance of the Suramadu Bridge by bundling it with the Juanda Airport - Tanjung Perak Toll Road (SERR).

Estimated Investment Cost: USD 721.35 Million

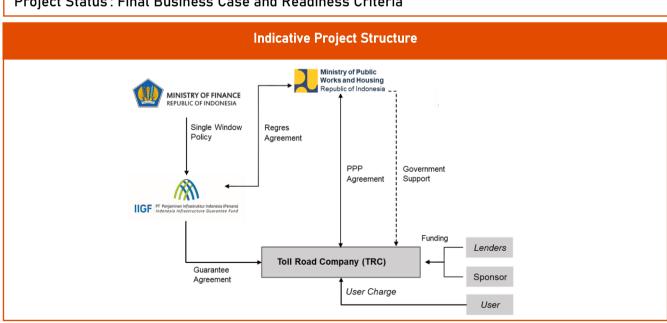
Financial Feasibility:

IRR : 11.34%

NPV : USD 18.87 Million

Estimated Concession Period: 50 years



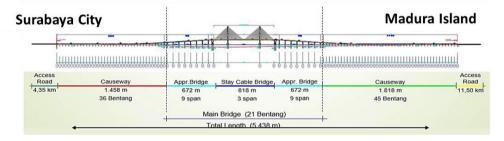


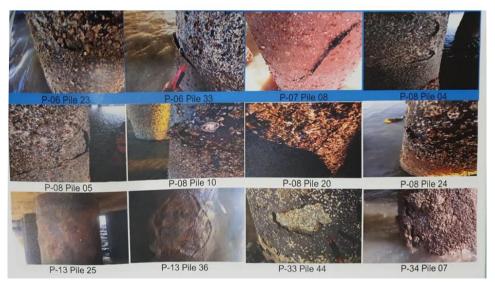
Project Title OM Suramadu Bridge Bundling Bandara Juanda-Tanjung Perak Toll Road (Surabaya Eastern Ring Road/SERR)			
Government	Minister of Public Works and Housing		
Contracting Agency	ng Agency		
Implementing Unit	Indonesia Toll Road Authority (BPJT)		
Preparation Agency	Directorate General of Public Works Infrastructures and Housing Financing		
Investment Cost	USD 721.35 Million		
Estimated Concession	50 Years		
Period			
Location	East Java Province		

1. Project Picture (Map and/or Illustration of Project)



LONGITUDINAL SURAMADU BRIDGE





Picture 1 - Route and examples of Suramadu Bridge maintenance

2. The Opportunity

2.1. Project Background

Suramadu Bridge with the length of 5,438 meters is a special long-span bridge with cable stayed construction. Based on Presidential Regulation Number 98 of 2018 concerning the operational status of the Surabaya-Madura Bridge as a non-toll road which was originally a toll road.

The Bandara Juada - Tanjung Perak Toll Road (Surabaya Eastern Ring Road/SERR) has been listed in Presidential Regulation Number 80/2019. It will complement the connectivity between transportation's node and reduce the volume of urban road networks.

2.2. Project Description

Suramadu Bridge is the longest cable stayed bridge in Indonesia which consists of three parts: the overpass (causeway), the connecting bridge (approach bridge), and the main bridge.

The life of Suramadu Bridge which is planned for 100 years must be supported by maintenance and strengthening of bridge structure which was originally operated with the minimum toll road service standards. Other than that, the bridge components at sea causes the risk of corrosion of the bridge foundation.

Suramadu Bridge is one of the supporting infrastructures to develop and increase the growth of the economy in Madura Island. Several planned development areas are Madura Special Zone (Kawasan Khusus Madura), Tainan Suramadu, Indonesia Islamic Science Park, and others.

There is potential for Madura development by integrating the Suramadu Bridge with the planned SERR Toll Road. The SERR Toll Road will be bundled to cross finance the Suramadu operational and maintenance. The Feasibility Study (FS) of bundling between OM Suramadu Bridge and SERR Toll Road started in Q2 2021 and will be finalized in Q3 2022.

2.3. Project Objectives

The objectives of Operation and Maintenance of the Suramadu Bridge Bundled with the SERR Toll Road are as follows:

- To strengthen the structure and foundation of Suramadu Bridge, which most of the components are located at sea.
- To enhance the monitoring method of bridge condition using SMKS System.
- To support the planned development areas especially in Madura Island.
- To complement connectivity between transportation's node and reduce the volume of urban road networks.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT).

Business entity shall be responsible to finance, operate, and maintain the Suramadu Bridge and SERR Toll Road during the concession period.

4. Technical Specification

The technical specifications for Suramadu Bridge are as follows:

No	Facilities Facilities	Capacity
1	Length	5,438 m
2	Bridge Width	2x15 m
3	Number of Lane	2x2x3.5 m
4	Motorbike lane	2x3.05 m
5	Maximum slope	3%

The technical specifications for SERR Toll Road are as follows:

No	Facilities	Capacity
1	Length	23.5 km
2	Design Speed	100 km/hour
3	Lane Width	3.60 m
4	Outer Shoulder Width	3.00 m
5	Inner Shoulder Width	1.50 m
6	Median Width (including inner shoulder)	5.50 m

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on the planned schedule, AMDAL study will be composed in Q2 2022 until Q4 2022.

6. Land Acquisition and Resettlement Action Plan

Based on the planned schedule, LARP study will be composed in Q2 2022 until Q4 2022.

7. Project Cost Structure

Estimated Project Cost	USD 721.35 Million	
Indicative Debt to Equity Ratio		
- Debt Level	70%	
- Equity Level	30%	
IRR	11.34%	
NPV	USD 18.87 Million	

8. Government Support and Guarantee

The feasibility study of the project indicates there is need for government supports in terms of land acquisition and part of the construction costs. Government guarantee through the Indonesia Infrastructure Guarantee Fund (IIGF) will also be necessary.

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Batam - Bintan Bridge

Location: Riau Islands Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Bridge

Description:

The project aims to construct a bridge connecting Batam and Bintan, which are located in the Riau Islands province. The project will utilize a Public-Private Partnership (PPP) scheme, with a user charge as the return of investment scheme.

Estimated Project Cost: USD 1,029.60 Million

(The PPP Portion)

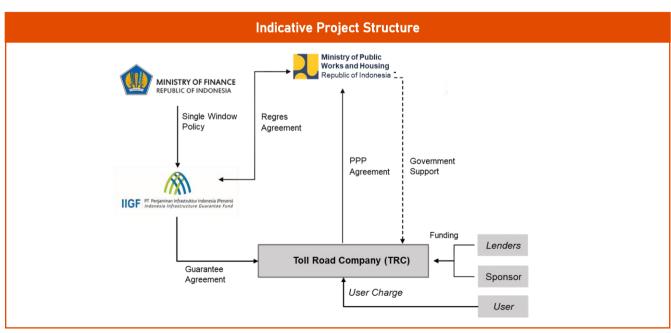
Financial Feasibility:

IRR : 10.44%

NPV : USD 51.15 Million

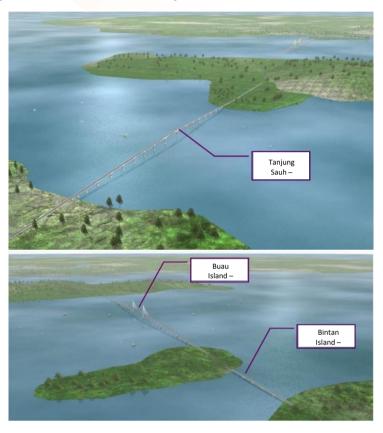
Estimated Concession Period: 50 years





Project Title	Batam-Bintan Bridge
Government	Minister of Public Works and Housing
Contracting Agency	
Implementing Agency	Indonesia Toll Road Authority (BPJT)
Preparation Agency	Directorate General of Public Works Infrastructure and Housing Financing (DJPI)
Project Cost	USD 1,029.60 Million
Estimated	50 years
Concession Period	
Location	Riau Islands Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Batam-Bintan Bridge Plan

2. The Opportunity

2.1. Project Background

Connectivity is one of the most important things in growing economic activities. Batam is planned to be developed into a national industrial zone and Batam as a Free Trade Zone (FTZ) area with major advantages in the field of trade and industry. Batam is also a strategic area because its location is near Singapore and Malaysia. Bintan Island is also a strategic area and also has some Free Trade Zone (FTZ) areas. This project will be built with the PPP scheme.

2.2. Project Description

This project is to construct a bridge connecting Batam and Bintan which is located in Riau Islands Province. This bridge alignment is Kabil (Batam) – Tanjung Sauh – Buau Island – Kuala Lobam (Bintan). The road length is 7,064 meters and the length of the bridge is 7,684 meters. The Batam-Bintan Bridge Construction Project is included in toll road infrastructure, and also one of the infrastructures that can be conducted with PPP scheme with user charge as the return of investment scheme. The study has indicated that this project needs Government support in

terms of partial construction from the Ministry of Public Works and Housing and Government Guarantee by PT PII. The scope of work for the business entity will be Design-Build-Finance for PPP Segment, Operate-Maintenance of all segments Batam-Bintan Bridge (Include Government Support Segment), and Transfer of the Asset after the final concession period.

2.3. Project Objectives

The objectives of this project are to support the development and accessibility of Batam dan Bintan in order to increase trade and industries in Batam and Bintan.

3. Business Entity's Scope of Work

The scope of work for the business entity will be Design-Build-Finance-Operate-Maintenance-Transfer (DBFOMT) The following are private partner's list of responsibilities:

- Designing a Detailed Engineering Design (DED) of the Batam-Bintan Bridge Construction Project for PPP Portion based on the basic design provided by GCA;
- 2) Construction of the Batam-Bintan Bridge for PPP Segment;
- Maintenance of the Batam-Bintan Bridge during the concession period, after the construction phase has been completed for the all of segment of Batam-Bintan Bridge; and
- 4) Sign and commit in the Guarantee Agreement with Indonesia Infrastructure Guarantee Fund (IIGF)

4. Technical Specification

The Batam-Bintan Bridge operation will be used as a toll road with dedicated motorcycle lanes thus the technical specifications will refer to all regulations and specifications in the geometric planning of roads (main road, ramp and access road). Some technical specifications for the main road including:

No	Facilities	Capacity
1	Bridge Length	7,684 m
2	Road Length	7,064 m
3	3 Design Speed 80 Km/h	
4	Number of Lane	2 x 2
5 Lane Width 3.6 n		3.6 m
6	Outside Shoulder Width	3.0 m
7	Inner side Shoulder Width	1.5 m
8	Median Width (include inner side shoulder)	4.0 m
9	9 Cross slope 2%	
10	Outside Shoulder slope	4%

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The study has indicated that this project needs Environmental Impact Assessment (EIA/AMDAL) which is the responsibility of Ministry of Public Works and Housing. It also indicated the needs of the Environmental Support and Capacity Study (*Kajian Daya Dukung dan Daya Tampung Lingkungan Hidup*/DDDTLH) which is the responsibility of Riau Islands Government. AMDAL and DDDTLH has been prepared in 2021.

6. Land Acquisition and Resettlement Action Plan

The study has indicated that this project needs land acquisition of 701,665.31 m2. Land acquisition is planned to be done in Q2 2023.

7. Project Cost Structure

Estimated Project Cost	USD 1,029.60 Million	
Indicative Debt to Equity Ratio		
- Debt Level 70%		
- Equity Level	30%	
IRR	10.44%	
NPV	USD 5115 Million	

8. Government Support and Guarantee

The study has indicated that this project needs Government support in terms of partial construction from the Ministry of Public Works and Housing and Government guarantee by PT PII.

9. Contact Information

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UNDER PREPARATION

WATER RESOURCE AND IRRIGATION

- 1. Development of Bodri Dam in Kendal Regency
- 2. Development of Merangin Dam
- 3. Komering Irrigation System (Unsolicited)
 4. High Level Diversion (HLD) Interconnection Channel Lombok (Unsolicited)
 5. 40 MW Hydro Power Plant on Tiga Dihaji Dam (Unsolicited)

Development of Bodri Dam in Kendal Regency

Location: Kendal, Central Java Province

Sector: Water Resources and Irrigation



Government Contracting Agency:

Minister of Public Works and Public Housing

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Dam

Description:

The Bodri River, situated in a coastal area and intersected by 12 rivers, holds great potential for multiple purposes, including irrigation, raw water supply, electricity generation, and flood control in Kendal district. The project aims to encompass the design, construction, financing, and maintenance of the dam, as well as the associated infrastructure and transfer systems. Its primary objective is to harness the resources of the Bodri River effectively, providing sustainable solutions for water management, power generation, and flood mitigation in the region.

Estimated Project Cost: USD 117.82 Million

Financial Feasibility:

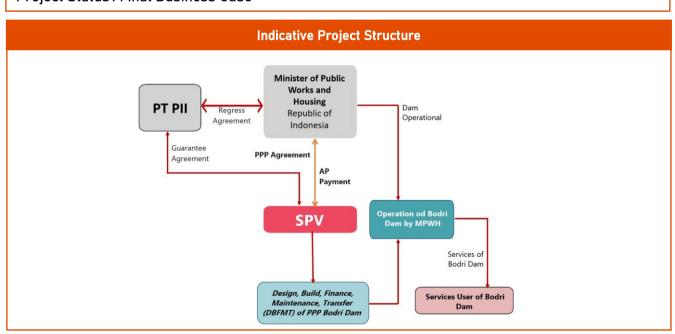
IRR : 9.46%

NPV : USD 34.25 Million

Estimated Concession Period: 4 years

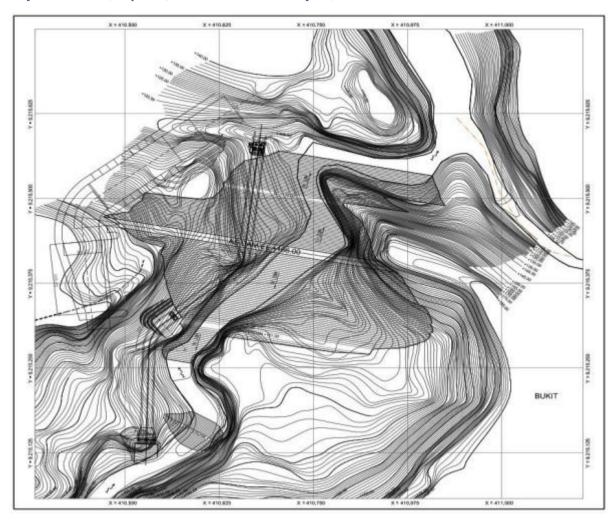
construction, 2 years reservoir filling and 12 years

Indicative Project Schedule Pre-Financial FBC RfP Bid Award Construction Qualification Close Q2 2023 Q4 2023 01 2025 01 2024 Q3 2023 Q3 2024 Project Status: Final Business Case



Project Title	Construction of Bodri Dam in Kendal Regency
Government Contracting Agency	Minister of Public Works and Public Housing
Implementing Agency Directorate General of Water Resources (DG	
Preparation Agency	Directorate General of Infrastructure Financing
Project Cost	USD 117.82 Million
Estimated Concession Period	18 years (4 years construction, 2 years reservoir
	filling & 12 years maintenance)
Location	Kendal, Central Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Dam Layout

2. The Opportunity

2.1. Project Background

Kendal is one of the areas in Central Java Province that has the potential to develop, especially in the agricultural sector, which is being prioritized in the national agricultural development process. Availability of water both sourced from groundwater and surface water is very necessary for the development of agriculture. In addition, flooding is one of the main issues related to controlling the destructive water power encountered by the Kendal district. As a city located in a coastal area with flat contours and located in the estuary of 12 rivers that pass through

its territory, t he Bodri River has the potential to be used as a dam for irrigation, raw water supply, the potential electric power and flood control in overcoming floods that occur in Kendal district.

2.2. Project Description

The Bodri Dam is a multipurpose dam PPP project in Indonesia. The Bodri Dam Project is located in Singgorojo Village, Kendal, Central Java Province. The multipurpose dam provides water for an irrigation scheme covering about 8,861 hectares in Kendal Regency with water gross storage volume of 41.7 Million m³, Bodri River flood reduction by 8.36% (Q100), there is a head of 43 m and a discharge of about 9.0 m³/s, which could generate power of 3.24 MW. Other program components include local water supply, recreation, and social infrastructure. The option in this project development is to build a dam using Availability Payment scheme to cover the private's investment, risks and returns. The concession will last 18 years (4 years construction, 2 years reservoir filling and 12 years maintenance).

2.3. Project Objectives

The Bodri dam construction in Central Java aims to contribute to irrigation water needs, raw water supply, flood control and electric potential. In accordance with the PUPR Visium 2020-2024 capacity target Indonesia's per capita multipurpose dam is 68.11 m³/capita/year. The construction of new dams in the future will be carried out to meet the national water and food security targets, in particular the provision of raw water of 54.81 cubic meters per second in 2024.

3. Business Entity's Scope of Work

Design-Build-Finance-Maintenance-Transfer (DBFMT)

The project scope is as follows:

- Preparing the design and specifications of Bodri Dam to obtain a design certification from the Minister of Public Works and Housing.
- 2. Financing (equity and loan) the initial capital costs of Bodri Dam construction and maintenance during the service life.
- 3. Constructing Bodri Dam after obtaining a design certification issued by the Minister of Public Works and Housing.
- 4. Performing 3 (three) types of maintenance: routine maintenance, periodic maintenance and rehabilitation
- 5. Transferring Bodri Dam to the government contracting agency after the concession period ended.

4. Technical Specification

The technical specifications for Bodri Dam in Kendal Regency are as follows:

No	Facilities Facilities	Capacity	
1	Length of crest dam	396.67 m	
2	2 Height 73.50 m		
3	Effective holding volume 24.08 Million m ³		
4	4 Reservoir capacity at Normal Water Level 41.7 Million m ³		
5	Dam Body Volume	2,119,458.68 m ³	
6	Inundation area	240.20 hectares	
7	7 Area 259.55 Ha		
8	Raw water supply	0.497 m³/det	
9	Flood reduction (Q100)	8.36%	
10	Elevation of normal water level	+ 160,00 m	

Dam element outline:

- a) The dam body
- b) Spillway building
- c) Building taking
- d) Dodge building

- e) Management office facility building
- f) Access roads
- g) Reservoir/reservoir
- h) Powerhouse/PLTM

5. Environmental Impact Assessment (EIA/AMDAL) Findings

For the construction of the Bodri dam, it is necessary to prepare an Environmental Impact Analysis (AMDAL) study to obtain an Environmental Permit given the regulations following Law Number 32 of 2009 concerning Environmental Protection and Management ("UU No. 32/2009"). Directorate General of Water Resources is preparing the AMDAL study and targeted to finish by September 2022.

6. Land Acquisition and Resettlement Action Plan

Based on survey results, currently, there are no residents affected by the relocation area, but there is 1 village affected by the relocation with an estimated area of < 10 ha. The community itself hopes that if there is an area for them to be affected by relocation/land acquisition, the form of compensation is in the form of money with a value of Rp. $5,000,000/m^2$. Further mapping of the current land status and the land area that needs to be expanded will be assessed in the subsequent studies.

7. Project Cost Structure

Estimated Project Cost	USD 117.82 Million	
Indicative Debt to Equity Ratio		
- Debt Level	70%	
- Equity Level	30%	
IRR	9.46%	
NPV	USD 34.25 Million	

8. Government Support and Guarantee

Final business case study indicates that this project will require government guarantee.

9. Contact Information

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Development of Merangin Dam

Location: Jambi

Sector: Water Resources and Irrigation



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Dam

Description:

The Merangin Dam project is a multifunctional dam designed to serve various purposes. It will provide irrigation for an area of 12,000 hectares, effectively control floods with a capacity of approximately 583.5 cubic meters per second in the densely populated lower part of the Merangin basin. The dam will also serve as a raw water source, supplying approximately 2 cubic meters per second, and has the potential to generate electricity with a capacity ranging from 90 to 107.5 MW.

Estimated Project Cost: USD 429.77 Million

Financial Feasibility:

IRR : 14%

NPV : USD 12.40 Million

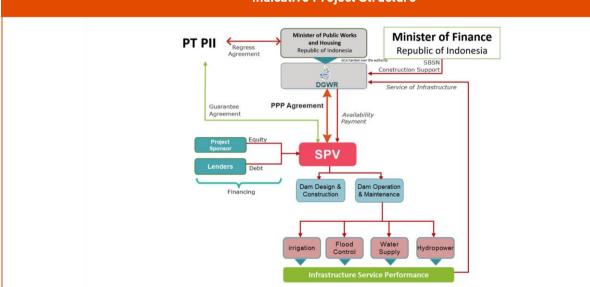
Estimated Cooperation Period: 20 years

Indicative Project Schedule



Project Status: Final Business Case

Indicative Project Structure



Project Title	Construction of Merangin Dam
Government Contracting Agency	Minister of Public Works and Housing
Implementing Agency	Directorate General of Water Resources (DJSDA)
Preparation Agency	Directorate General of Public Works and Housing Infrastructure Financing (DJPI) and PT Sarana Multi Infrastruktur (PDF assignment by the Ministry of Finance)
Project Cost	USD 429.77 Million
Estimated Concession Period	20 years
Location	Renah Pembarap District, Merangin Regency, Jambi Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Merangin Dam



Picture 2 - Map of Merangin Dam

2. The Opportunity

2.1. Project Background

The potential for surface water flow owned by Merangin Regency is relatively abundant. This condition is reflected by most of the rivers in the Batanghari watershed, throughout the year, never experiencing drought, so the potential for surface water is enormous. In addition, the water conditions of the Batang Merangin river and surface water in several sub-districts have a lot of overland flow, so flooding and inundation are often found in several districts. One of the rivers that contribute significantly is the Batang Merangin-Tembesi River. Therefore, there is potential to be utilized for providing irrigation water, raw water for drinking water, generating electricity and other uses such as flood control.

The proposed Merangin multipurpose dam is considered to meet the high demand of new agriculture irrigation, to address the impacts of climate change on the reliability of water supply as well as to mitigate flood risks, agriculture, and energy generation as well as renewable energy needs in a green and sustainable manner.

The Merangin Dam provision aims to support Visium PUPR 2030, which increases the resistance of national water with a capacity of 120 m3/capita/year and in accordance with the 2020-2024 National Medium-Term Development Plan regarding the Development of 18 Multipurpose Dams as Major Project.

2.2. Project Description

The Merangin Dam PPP Project is the first multi-purpose dam PPP project in Indonesia. The Merangin Dam Project is located in Simpang Parit Village, Renah Pembarap District, with coordinates 2° 9'52.82" South Latitude and 102°1'20.40" East Longitude.

The USD 262,98 million program involves a PPP scheme with a DBFOMT modality that includes financing, designing and building, operating and maintaining a multi-purpose dam to provide water for an irrigation scheme covering

about 12,000 hectares in Merangin Regency, control floods of approximately 583.5 m3/s in the Merangin basin, impound water for a 90 - 107.5 MW hydropower. Other program components include local water supply until $2 \text{ m}^3/\text{s}$ and tourism. The Government will provide land acquisition of $\pm 853.22 \text{ ha}$.

The option in this project development is to build a dam, and the payment mechanism through Availability Payment covers the private's investment, risks and returns.

2.3. Project Objectives

The objectives of this project are to foster the socio-economic development in the Merangin Regency and Jambi Province through raw water supply to increase the piping network of drinking water in accordance with the 2020-2024 National Medium-Term Development Plan regarding the Major Project is access of piped drinking water (10 million house connection), water supply for irrigation to development agriculture, to reduce floods and its risks in the downstream area of Jambi Province. Furthermore, the proposed Merangin Multipurpose Dam could produce hydropower. The proposed Merangin Multipurpose Dam is in line with the energy transition plan, which is currently being pushed to reduce dependence on the use of fossil energy and replace it with renewable energy generation, with a target of 23% renewable energy by year 2025 from the achievement of the renewable energy mix of 14.02% currently.

3. Business Entity's Scope of Work

The modality of PPP Merangin Multipurpose Dam scheme is "Design-Build-Finance-Operate - Maintain and Transfer" (D-B-F-O-M-T).

4. Technical Specification

Basic Design features of the Merangin Multipurpose Dam is the following.

basic besign reactives of the merangin mattiput pose barn is the following.				
Length of crest dam	335 m	Effective inundation area	686.76 ha	
Width of crest dam	12 m	Effective inundation volume	100.17 million m ³	
Height of main dam	94 m	Minimum inundation volume	75.0 million m³	
Peak Elevation dam	+229m	QPMF Elevation	El+225.9 m	
Spillway Elevation	+220 m	Flood Control (QPMF)	583.5 m³/s	
Irrigation discharge allocation	25.75 m³/s	Type of Dam	Earthfill with clay core	

5. Environmental Impact Assessment (EIA/AMDAL) Findings

According to the Regulation of Minister of Environment and Forestry No. 38/2019, the proposed PPP Merangin Multipurpose Dam Project requires to have an Environmental Impact Assessment (EIA / "AMDAL") type A. EIA scope includes is not limited to the following: (i) identification of potential mitigation measures and discussion of these with BWS Sumatera VI and others, to analyze practicality and likely cost; (ii) Finalization of recommended mitigation

measures required during design, construction and operation of the project; (iii) Development of cost estimates of the mitigation measures; (iv) Preparation of a project-specific Environment Management Plan/ Mitigation Management Action Plan.

The government has conducted the drafting process of the EIA Study by the year 2020. The progress of EIA is waiting for the suitability of Space Utilization Activities (*Kesesuaian Kegiatan Pemanfaatan Ruang*/KKPR) for certification of EIA document.

6. Land Acquisition and Resettlement Action Plan

The government has conducted the LARAP Study on an area of ±853.22 ha by the year 2020, consisting of (i) a Social Economic survey; (ii) a census of the population to be affected by the project and preparation of desegregated data; (iii) identification of socio-economic impacts of the project to the stakeholders; (iv) carrying out of an aerial survey of the project area and cadastral survey of the land parcels to be affected and accompanying list of the registered land owners; and (v) determination of the land to be acquired and the tentative compensation values for both land, permanent, semi-permanent and temporary structures and both cash/subsistence crops. The government (MPWH) is drafting Land Acquisition Planning Documents for submission of location determination to the Governor of Jambi. Land Acquisition will be carried out in 2023.

7. Project Cost Structure

Estimated Project Cost	USD 429.77 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	14%
NPV	USD 12.40 Million

8. Government Support and Guarantee

The Government Guarantee for this project will be in the form of guarantee from PT PII.

9. Contact Information

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Komering Irrigation System

Location: South Sumatera and Lampung Province

Sector: Water Resources and Irrigation



Government Contracting Agency:

Minister of Public Works and Public Housing

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Irrigation System

Description:

Komering Irrigation Area has a potential of 121,500 Ha. From 1990 to 2015, a functional irrigation network covering an area of 59,148 Ha has been built, consisting of Komering Primary Channel, Secondary Channel, as well as Rehabilitation of Secondary and Tertiary Channel. Komering Irrigation system supports the government's target in the MPWH Strategic Plan 2020-2024, which is the rehabilitation of 2,000,000 hectares.

Estimated Project Cost: USD 163.78 Million

Financial Feasibility:

IRR : 11.75%

NPV : USD 17.01 Million

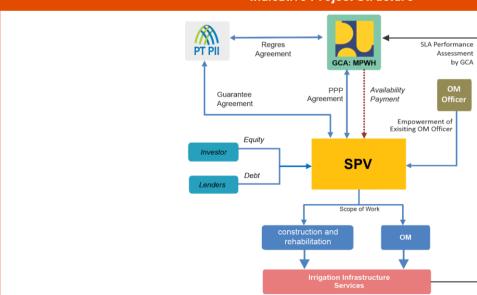
Estimated Concession Period: 15 years (2 years of rehabilitation, 13 years of service).

Indicative Project Schedule



Project Status: Evaluation of Feasibility Study

Indicative Project Structure



Project Title	Komering Irrigation System
Government Contracting Agency	Minister of Public Works and Public Housing
Implementing Agency	Directorate General of Water Resources (DGWR)
Preparation Agency	Directorate General of Infrastructure Financing
Project Cost	USD 163.78 Million
Estimated Concession Period	15 years (2 years construction/rehabilitation & 13 years
	operation and maintenance)
Location	Location: Region of East Ogan Komering Ulu
	and Ogan Komering Ilir, South Sumatera Province, Region of
	Way Kanan, Lampung Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Komering Irrigation System Layout

2. The Opportunity

2.1. Project Background

The Komering Irrigation Area began construction in 1990, starting with the construction of the Perjaya Weir and the Main Irrigation Network. The initial target of this irrigation area development project as a whole is around 120,000 ha which will be implemented in three stages. The project will in place partially in both south sumatera province and Lampung province.

The implementation of Phase-I was completed in October 1996, while Phase-II Phase-I, namely PIK (II-1), was carried out from 1996 to 2001. Phase-II Phase-2 construction began in 2005 and was completed in mid-2013. In 2019, studies began and continued the construction of the Lempuing II Irrigation Area covering an area of 8600 Ha. Currently, the Lempuing II Irrigation Network is under construction and is planned to be completed in 2025.

PPP Based on Sharia Principles of Komering Irrigation Area Project of South Sumatra Province (Unsolicited) will be intended to assist the PUPR Minister's program in accelerating and improving water use for irrigation.

2.2. Project Description

Komering Irrigation Area has a potential of 121,500 Ha. From 1990 to 2015, a functional irrigation network covering an area of 59,148 Ha has been built, consisting of Komering Primary Channel, Secondary Channel, as well as Rehabilitation of Secondary and Tertiary Channel.

Scope of Operation and Maintenance of total 67.648 Ha of irrigation area. The project includes implementation of Smart Irrigation Asset Management System.

2.3. Project Objectives

The objectives of this project are to foster the socio-economic development in the Region of East Ogan Komering Ulu and Ogan Komering Ilir, South Sumatera Province, also Region of Way Kanan, Lampung Province through irrigation services to increase the food production accordance with The National Medium-Term Development Plan for 2020-2024 (RPJM 2020-2024) as stipulated in Presidential Regulation Number 18 of 2020, the government has targets in developing basic infrastructure, one of which is 500,000 ha of irrigation networks, in this case to maintain sustainable resource productivity climate change adaptive agriculture, precision farming systems, land management and irrigation water.

Project will maximize the supply of irrigation water for an irrigation area of around 120,000 Ha. This project also supports infrastructure development for multi-purpose reservoirs and irrigation modernization as stipulated in the National Medium-Term Development Planning, through a strategy for building and rehabilitating irrigation networks.

3. Business Entity's Scope of Work

The modality of PPP Merangin Multipurpose Dam scheme is "Design-Build-Finance-Operate - Maintain and Transfer" (D-B-F-O-M-T). Scope of Work are as follows:

- 1. Revitalization/rehabilitation: includes secondary and sub secondary channels spread across d.l. Komering area of 53,148 ha obtained from the total area of the existing d.l. Commercial 59,148 Ha;
- 2. Irrigation modernization: procurement, installation of smart irrigation asset management system (SIAMS).
- 3. Operation and maintenance: the komering irrigation area covering an area of 67,648 Ha, including the existing irrigation area covering an area of 59,148 Ha and the new lempuing irrigation area covering 8,500 Ha;
- 4. Conduct studies related to water allocation and smart water management system;
- 5. Institutional social strengthening.

4. Technical Specification

The technical specifications for Komering Irrigation System are as follows:

- 1. Rehabilitation of:
 - a) Perjaya Weir (landscape);
 - b) Irrigation System, Broken Lining of 84.236 m, broken dike of 1.522 m, sedimentation of 77.116 m;
 - c) Sluice replacement of 147 pieces, rehabilitation of 566 pieces and repaint of 717 pieces; and
 - d) Inspection pavement of 450,78 km.
- 2. Modernization of Perjaya Weir and Komering Irrigation System of 122 sluice using sensors and robotization.
- Operation and Maintenance of Perjaya Weir and Komering Irrigation System of 926,47 km include Lempuing II subirrigation area in 2026.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The project is an activity or business that is required to prepare and have an EIA document, which in this case is important for obtaining Environmental Approval. However, because the project is implemented in a brown field area, the environmental approval and existing EIA documents for this project should have been obtained by the GCA. Therefore, the need for EIA in the Project is to update and adapt the existing EIA Documents to the scope of the Project to be carried out which was with BBWS Sumatra VIII.

6. Land Acquisition and Resettlement Action Plan

Land acquisition is carried out if the land to be used to build the Project does not yet belong to the Government/Regional Government. Referring to Article 10 paragraph (1) of Presidential Decree 38/2015, land acquisition for PPPs is carried out by the Government in accordance with statutory provisions regarding land acquisition for development in the public interest.

In relation to the Project, land acquisition activities do not need to be carried out because the Project is implemented in a brownfield location and based on technical studies, no additional land is needed.

7. Project Cost Structure

Estimated Project Cost	USD 163.78 Million
Indicative Debt to Equity Ratio	
- Debt Level	62.74%
- Equity Level	37.26%
IRR	11.75%
NPV	USD 17.01 Million

8. Government Support and Guarantee

The Government Guarantee for this project will be in the form of guarantee from PT PII. This project will also implement through sharia scheme and will assistance by National Sharia Council-Indonesian Ulema Council and National Islamic Finance Committee.

9. Contact Information

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High Level Diversion (HLD) Interconnection Channel Lombok

Location: Lombok Island, West Nusa Tenggara Province

Sector: Water Resources and Irrigation



Government Contracting Agency:

Minister of Public Works and Public Housing

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment

Sub-Sector: Irrigation System

Description:

High Level Diversion (HLD) is a water dividing system that spans 12 watersheds. This system consists of two interdependent main channels and 24 dependent channels which are connected to 490 headworks. HLD aims to transfer water from surplus watersheds to deficit watersheds.

Estimated Project Cost: USD 112.05 Million

Financial Feasibility:

IRR : 11.84%

NPV: USD 12.42 Million

Estimated Concession Period: 2 years

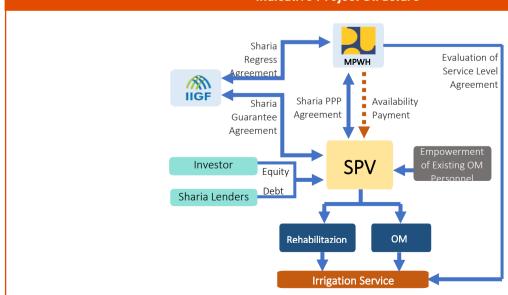
construction/rehabilitation period, 13 years of operation.

Indicative Project Schedule



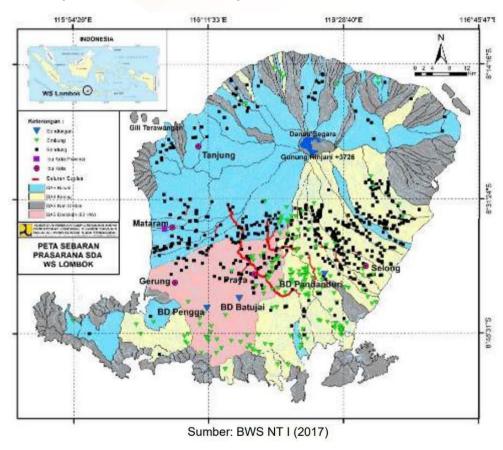
Project Status: FS Evaluation

Indicative Project Structure



Project Title	Revitalization and Modernization of High Level Diversion (HLD) Interconnection Channel PPP Project
Government Contracting Agency	Minister of Public Works and Public Housing
Implementing Agency	Directorate General of Water Resources (DGWR)
Preparation Agency	Directorate General of Infrastructure Financing
Project Cost	USD 112.05 Million
Estimated Concession Period	15 years (2 years construction/rehabilitation, & 13 years
	operation and maintenance)
Location	Lombok Island, West Nusa Tenggara

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - HLD Interconnection Channel Distribution Map

2. The Opportunity

2.1. Project Background

Lombok Island has uneven hydrological conditions. The potential for water resources in West Lombok is huge, but the land that can be used for agriculture is very limited. In contrast, the land potential for agriculture in Central Lombok and East Lombok are vast but not supported by the availability of water resources. Therefore, the High Level Diversion (HLD) Interconnection Channel was built to make water supply even distribution, especially for irrigation water.

2.2. Project Description

Lombok HLD Interconnection Channel consists of 2 main channels, namely the Upper HLD Channel (Babak - Rutus) and the Lower HLD Channel (Jangkok - Babak).

- Upper HLD is administratively located in two districts, namely Central Lombok Regency and East Lombok Regency. The length of the HLD Babak - Rutus main channel is 16.5 km with a maximum discharge of 6 m³/second.
- Lower HLD is administratively in two districts, namely West Lombok Regency and Central Lombok Regency. The length of the main channel HLD Jangkok - Babak is 43.5 km with a maximum discharge of 12 m3/second.

2.1. Project Objectives

Lombok HLD Interconnection Channel PPP Project will maximize the supply of irrigation water for an irrigation area of \pm 99,000 Ha. This area is spread throughout almost the entire island of Lombok except for the northern island of Lombok. This project also supports infrastructure development for multi-purpose reservoirs and irrigation modernization as stipulated in the National Medium-Term Development Planning, through a strategy for building and rehabilitating irrigation networks.

3. Business Entity's Scope of Work

Rehabilitation-Design-Build-Finance-Operate-Maintenance-Transfer (RDBFOMT)

The project scope is as follows:

- 1. Lower HLD Channel Rehabilitation: 9 km
- 2. Upper HLD Channel Rehabilitation: 16.5 km
- 3. Supply Channel Rehabilitation: 24 sections, or 70.4 km
- 4. Construction of West Diversion Canal: 21.12 km
- 5. Rehabilitation of 435 Non-HLD Headworks
- 6. Implementation of Irrigation Modernization through Smart Water Management System
- 7. Operation and Maintenance of Lower and Upper HLD Channels, Supply Channels, West Diversion Canal, and Headworks

4. Technical Specification

The technical specifications for HLD Interconnection Channel are as follows:

No	Facilities	Capacity
1	Upper HLD Channel	16,5 km
2	Lower HLD Channel	43,5 km
3	West Diversion Canal	21,32 km
4	Supply Channel (24 channels)	51,52 km
5	HLD Headworks	55 location
6	Non-HLD Headworks	435 location

5. Environmental Impact Assessment (EIA/AMDAL) Findings

For HLD Interconnection Channel Lombok PPP Project, it is necessary to prepare an Environmental Impact Analysis (AMDAL) study in order to obtain an Environmental Permit in view of the regulations in accordance with Law Number 32 of 2009 concerning Environmental Protection and Management ("UU No. 32/2009"). But currently the AMDAL study has not been prepared.

6. Land Acquisition and Resettlement Action Plan

Land acquisition is carried out if the land to be used to build the Project does not yet belong to the Government/Regional Government. Referring to Article 10 paragraph (1) of Presidential Decree 38/2015, land acquisition for PPPs is carried out by the Government in accordance with statutory provisions regarding land acquisition for development in the public interest. Therefore, further assessment is needed in order to define land acquisition area and if there is resident affected by the construction of West Diversion Canal. If there is affected resident then resettlement action plan will be needed.

7. Project Cost Structure

Estimated Project Cost	USD 112.05 Million
Indicative Debt to Equity Ratio	
- Debt Level	62.09%
- Equity Level	37.91%
IRR	11.84%
NPV	USD 12.42 Million

8. Government Support and Guarantee

The Government Guarantee for this project will be in the form of guarantee from PT PII. This project will also implement through sharia scheme and will assistance by National Sharia Council-Indonesian Ulema Council and National Islamic Finance Committee.

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40 MW Hydro Power Plant on Tiga Dihaji Dam

Location: South Ogan Komering Ulu (OKU) Regency, Banten Province

Sector: Water Resources & Irrigation



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Hydro Power Plant

Description:

The Project is located on Tiga Dihaji Dam, Komering River Basin, South Ogan Komering Ulu (OKU) Regency, South Sumatera Province. The Project is proposed by using Unsolicited PPP through Design, Build, Finance, Operate, Maintain and Transfer (DBFOMT) scheme. It is estimated generating electricity with 40 MW capacity.

Estimated Project Cost: USD 76.08 Million

Financial Feasibility:

IRR : 12.53%

NPV: USD 12.25 Million

Estimated Concession Period: 27 years (2 years of construction, 25 years of service period).

Indicative Project Schedule



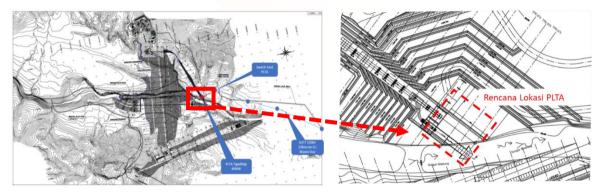
Indicative Project Structure

Project Status: Final Business Case

Tiga Dihaji Dam Management UnitBBWS Sumatera VIII Dam O/M Service Agreement Dam O/M Contractor (or HPP SPV) OWNER REPRESENTATIVE GCA PUPR/MPWH Ditjen. SDA/DGWR Equity Financing Financing Agreement Company/ TEXT PT. FIRE Persons Electricity revenue Electricity revenue

Project Title	40 MW Hydro Power Plant on Tiga Dihaji Dam
Government Contracting Agency	Minister of Public Works and Housing
Implementing Agency	Director General for Water Resources
Preparation Agency	Directorate General of Financing of Public Works Infrastructure and Housing
Project Cost	USD 76.08 Million
Estimated Concession Period	27 years (2 years of construction, 25 years of service period)
Location	South Ogan Komering Ulu (OKU) Regency, Banten Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Tiga Dihaji Dam

2. The Opportunity

2.1. Project Background

In accordance with long term program of the State Electricity Company - PT. PLN (Persero) to get affordable tariff of electricity, the use of water resources needs to be utilized for the welfare and society. Hydro power plant has been managed by the government through the PT PLN (Persero) as the main supplier of electricity for both household and industrial needs. Even though, PLN has not been able to meet the demand for electricity for all regions in Indonesia, so some areas have not yet been reached by electricity.

In order to fulfill the supply of 35 GW of electricity as outlined in the 2015-2034 National Electricity Master Plan (RUKN), additional generators, transmission & substations and distribution have been planned as stated in Electricity Supply General Plan (RUPTL). So, in 2034 it is expected that electricity can reach all regions in Indonesia.

To realize this plan, the Business Entity as project initiator proposes a PPP Project of 40 MW Hydropower Plant Infrastructure Delivery on Tiga Dihaji Dam which is located in South Ogan Komering Ulu (OKU) Regency, South Sumatra Province. The PLTA development plan is expected to increase the availability of electrical energy for both household and industry, so it will increase economic society around South OKU Regency, South Sumatra

2.2. Project Description

The description of this project is as follows:

Project Name : 40 MW Hydro Power Plant on Tiga Dihaji Dam

Project Location : Tiga Dihaji Dam, Komering River Basin, South Ogan Komering Ulu

(OKU) Regency, South Sumatera Province

Project Method : Design-Build-Finance-Operate-Maintain-Transfer (D-B-F-O-M-

T)

Financing scheme : Public Private Partnership

Government Contracting Agency : Minister of Public Works and Housing

Concession : 27 years (2 years of construction, 25 years of service period)

Estimated Power (MW) : 40 Estimated Annual Energy (GWh) : 209.223

2.3. Project Objectives

The benefit of Tiga Dihaji Dam is for irrigation as main function, raw water supply, flood control and tourism. In addition, the benefits of the Tiga Dihaji Dam is also used for generating hydroelectric power sourced from new and renewable energy, so it could increase the electrification ratio in South Ogan komering Ulu Regency, South Sumatera.

The development of Tiga Dihaji Hydropower Plant is also in line with the energy transition plan, which is currently being pushed to reduce dependence on the use of fossil energy and replace it with renewable energy generation, with a target of 23% renewable energy by year 2025 from the achievement of the renewable energy mix of 14.02% currently.

3. Business Entity's Scope of Work

Design-Build-Finance-Operate-Maintain-Transfer

Project scope is as follows:

- Power Plant Unit (Penstock, Bypass, Hydromechanical Equipment, Power House, Turbine and Electromechanical Equipment, Switchyard, 150 kV Transmission and Electrical);
- Supporting Infrastructure (such as Office, Access Road, Operator House, and Guard House);
- Tiga Dihaji Dam maintenance to all or part of the dam infrastructure.

4. Technical Specification

The technical specifications for South Tangerang Waste to Energy are as follows:

No	Facilities	Capacity
1	Туре	With reservoir
2	Normal water level	+315.674 m
3	TWL	+207.650 m
4	Estimated Planned Discharged (m3/s)	45.50
5	Water Elevation (m)	108.02
6	Estimated Power (MW)	40
7	Annual Estimated Energy (GWh)	209.223
8	Transmission cable	Power house to Muara Dua Substation through 150 kV
		high voltage transmission lines (SUTT)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The construction of the high voltage transmission lines (SUTT) of Tiga Dihaji Hydro Pwer Plant requires approximately 225 m2 (44 towers) of land for each tower and 6000 m2 of switchyard land which is outside of the Tiga Dihaji Dam area. So, according to the Regulation of Minister of Environment and Forestry No. 4/2021 about List of Business and/or Activities Required to Have an Analysis of Environmental Impacts, Environmental Management Efforts and Environmental Monitoring Efforts or Statement of Capability for Environmental Management and Monitoring, this project is required to have Environmental Management Efforts and Environmental Monitoring Efforts with B category.

6. Land Acquisition and Resettlement Action Plan

The location of the hydropower plant is both inside and outside of the Tiga Dihaji Dam area. For the construction of the Penstock, Power House, Bypass Pipeline, Access Road, Operator's House, Guard Post, it requires approximately ±10,000 m2 of land which is within the Tiga Dihaji Dam area. where the land will be submitted as utilization of State-Owned Assets.

The Tiga Dihaji Dam area is located in the Area for Other Uses (APL) where a Borrow-to-Use Forestry Permit (IPPKH) is not required. Meanwhile, the construction of the high voltage transmission lines (SUTT) requires approximately 225 m2 (44 towers) of land for each tower and 6000 m2 of switchyard land which is outside of the Tiga Dihaji Dam area. The land acquisition will be carried out by Business Entity as initiator project (BUP) and it is also responsible to provide compensation costs for land under the SUTT route to affected communities.

7. Project Cost Structure

Estimated Project Cost	USD 76.08 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	12.53%
NPV	USD 12.25 Million

8. Government Support and Guarantee

The Feasibility Study indicates the government support options for this project, namely tax incentives and licensing/permit facilities.

9. Contact Information

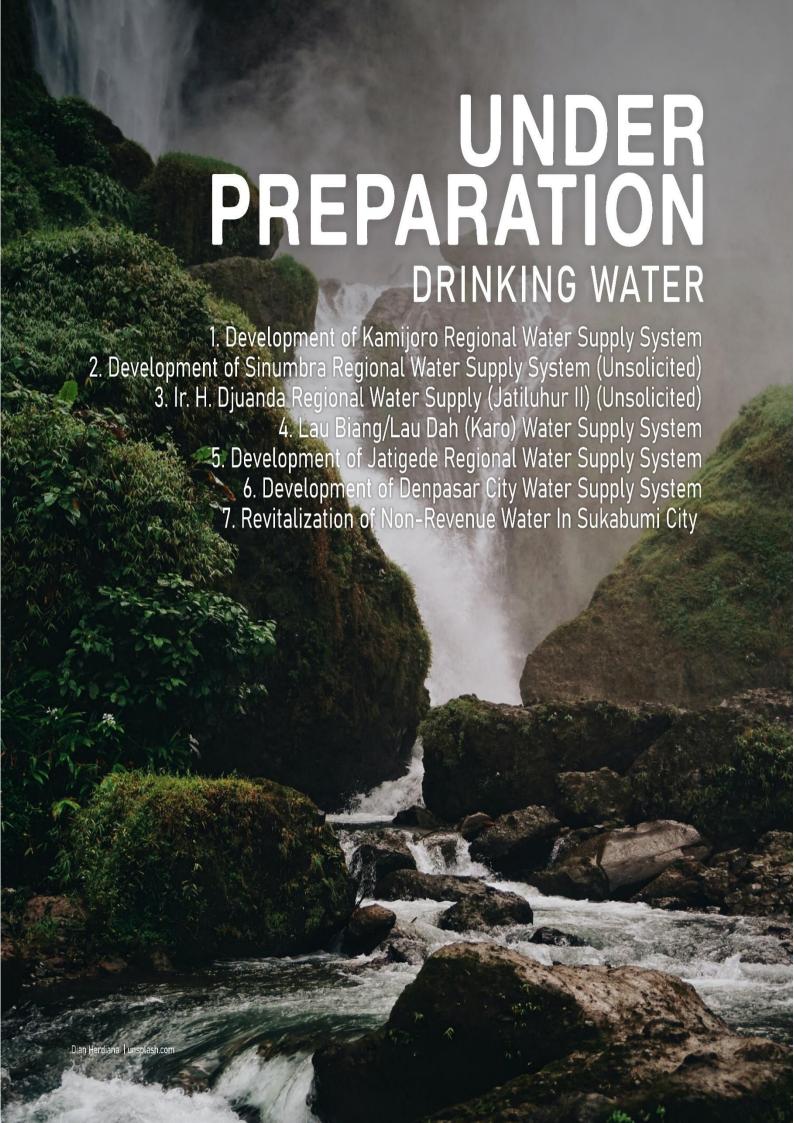
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Position : Director for Water Resources Infrastructure Financing

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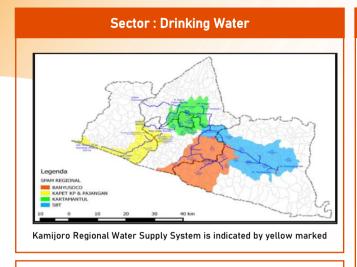
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Development of Kamijoro Regional Water Supply System

Location: Kulon Progo and Bantul, Special Region of Yogyakarta



Government Contracting Agency:

Governor of Special Region of Yogyakarta hand over to Perumda Air Bersih Tirtatama DIY

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Water Supply System

Description:

The Kamijoro Regional Water Supply system is a provincial project in the Special Region of Yogyakarta. Its primary objective is to provide a reliable drinking water supply (Air Minum Curah) to the regencies of Bantul and Kulon Progo. The project was initiated in response to the limited water resources available to the local communities, while also catering to the growing demands resulting from the development of the New Yogyakarta International Airport and industrial areas within the two regencies. To achieve this, the project utilizes bulk water sourced from the Progo River through the Kamijoro Dam. The planned capacity of the system is to supply 475 liters per second (lps) of drinking water, with 189 lps allocated to Bantul Regency and 286 lps to Kulon Progo Regency.

Estimated Project Cost: USD 21.9 - 23.7 Million

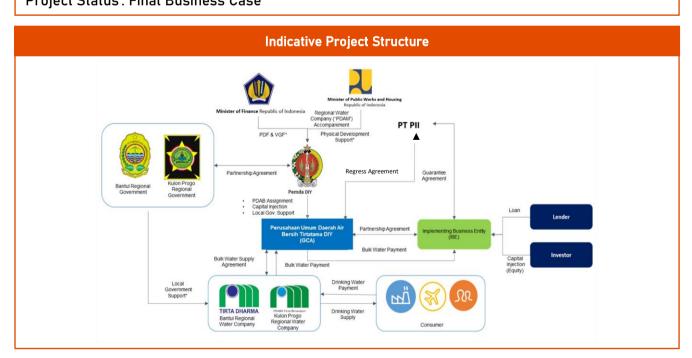
Financial Feasibility:

IRR : 15%

NPV : Under Calculation

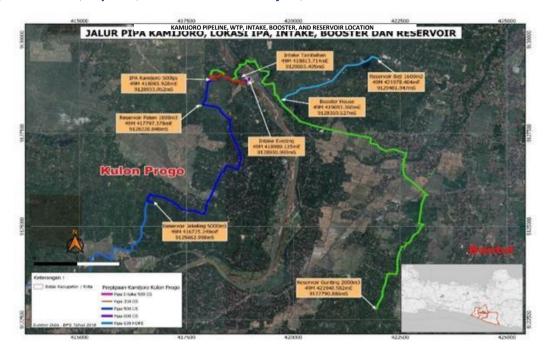
Estimated Concession Period: 25 years

Indicative Project Schedule Construction Bid Award Financial Final Business Pre-Agreement Case Q1-Q2 2023 Qualification Q4 2023 - Q1 Signing Close Q4 2024 Q1 Q2 - Q4 2023 2024 Q2 2024 Q4 2024 2025 Project Status: Final Business Case



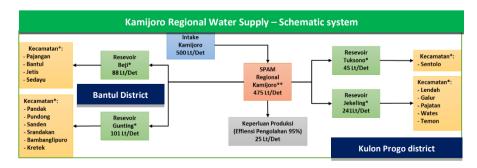
Project Title	Construction of Kamijoro Regional Water Supply System	
Government Contracting Agency	Governor of Special Region of Yogyakarta hand over to	
	Perumda Air Bersih Tirtatama DIY	
Implementing Agency	Public Works, Housing, and Energy and Mineral Resources	
	Agency, Special Region of Yogyakarta	
Preparation Agency	National Development Planning Agency and PT Sarana Multi	
	Infrastruktur (PDF assignment by the Ministry of Finance)	
Project Cost	USD 21,9 – 23,7 Million	
Estimated Concession Period	25 years	
Location	Kulon Progo Regency and Bantul Regency, Special Region of	
	Yogyakarta	

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Map of Kamijoro Water Supply System

As shown in Picture 1, Kamijoro Regional Water Supply Project is forecasted to supply the Regencies of Bantul and Kulon Progo with a total capacity of 475 liters per second ("lps"), utilizing raw water from the Progo river located in Kulon Progo Regency. The project will supply 286 lps to Kulon Progo Regency and 189 lps to Bantul Regency.



Picture 2 - Schematic System of Kamijoro Regional Water Supply Project

In early 2017, Kamijoro Regional Water Supply Project was initially developed to separately operate on 2 different systems (Kamijoro system I to provide Kulon Progo Regency and Kamijoro system II to provide Bantul Regency).

Along with its development, there was an updated plan to integrate 2 different systems into one regional water supply system, described in the schematic diagram above. The project utilized 500 lps raw water from the Progo river. Subsequently, with the assumption of 95% production efficiency, Kamijoro Regional Water Supply Project is forecasted to distribute 475 lps bulk water to Regencies of Bantul and Kulon Progo. The supply capacity for Bantul is 189 lps using 2 reservoirs, Beji and Gunting, while the supply capacity to Kulon Progo is 286 lps using 2 pools, Tuksono and Jekeling.

2. The Opportunity

2.1. Project Background

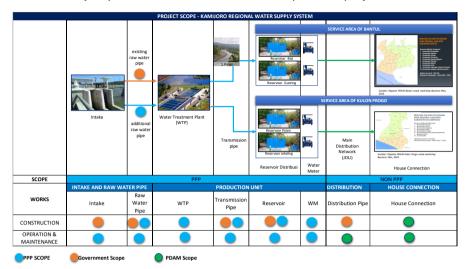
- The needs of the project were driven by the water shortage in the Regencies of Bantul and Kulon Progo, while at the same time, the quality and continuity of existing water available have been deteriorated.
- Overexploitation of groundwater by local people is not suitable for drinking. The current water pipeline service is considered low, approximately 35% of the Special Region of Yogyakarta population.
- Based on FBC Preliminary Report, the current coverage area of the Regional-Owned Drinking Water Company (*Perusahaan Daerah Air Minum*/"PDAM") in Kulon Progo Regency and Bantul Regency are 49,84% and 21,72% (2018), respectively. These percentages are considered significantly below the government target to fulfill 100% of the drinking water supply in Indonesia, as mandated on RPJMN 2020 - 2024.
- The development of Yogyakarta International Airport ("YIA") and Sentolo Industrial Area establishes significant water demand for Kulon Progo Regency. Similarly, the development of the Pajangan – Sedayu Industrial Area also creates water demand for Bantul Regency.

2.2. Project Description

- The project will use raw water from the Progo River. The water intake facility is near Kamijoro Dam (on the west side). The intake facility has been constructed by Directorate General of Water Resources (Balai Besar Wilayah Sungai Serayu Opak) through multi-years contract scheme from 2017-2019 with a capacity of 500 liters per second.
- Assuming 95% production efficiency from intake, the WTP is designed to supply 475 lps, which will serve Kulon Progo Regency (286 lps) and Bantul Regency (189 lps).
- The estimated sub-districts within Bantul Regency which covered by this project are Pajangan, Pandak, Sedayu, Bantul, Sanden, Srandakan, Pundong, Kretek, Bambangliouro and Jetis.
- The estimated sub-districts within Kulon Progo Regency which covered by this project are Sentolo, Lendah, Galur, Panjatan, Wates, and Temon.
- The scope of the distribution unit (from reservoirs onwards) will be procured through the central or local government's budget.
- Furthermore, the scope of House Connection unit will be undertaken by the Region-Owned Drinking Water Company (*Perusahaan Daerah Air Minum/*"PDAM").
- In line with PPP preparation stage, Provincial Government has already established the Provincial Government Water Supply Company (Perusahaan Air Minum Daerah /"PDAB") as operator, which will be assigned to manage the supply of bulk water to PDAMs. PDAB will also further be assigned as Government Contracting Agency ("GCA").

2.3. Project Scope

Based on FBC Preliminary Report, below are the indicative scope of the project:



The Special Purpose Company ("SPC") will be responsible for constructing, operating and maintaining the Water Treatment Plant, Clean Water Transmission pipe, and reservoirs until the handover points to PDAM. The SPV scope also includes operating and maintaining the intake facilities constructed by the Ministry of Public Works and Housing.

3. Business Entity's Opportunity

Private sector which will participate in this project will have the opportunity to:

- 1. Operate and Maintain intake facilities built by the Ministry of Public Works and Housing.
- 2. Construct, Operate and Maintain Water Treatment Plant with the capacity to produce 475 lps.
- 3. Construct, Operate and Maintain transmission pipeline.
- 4. Construct, Operate and Maintain two reservoirs (Beji and Gunting) to serve 189 lps to Bantul Regency.
- Construct, Operate and Maintain two reservoirs (Tuksono and Jekeling) to serve 286 lps to Kulon Progo Regency.

4. Project Technical Specification

Project technical specification will be further studied on FBC Final Report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The previous Environmental Impact Assessment (AMDAL) of Kamijoro Stage I (Kulon Pogo) was undertaken by the Government of the Special Region of Yogyakarta. While there are changes in the scope of the integrated system of the Water Supply project for Bantul and Kulon Progo, the permit requires a new AMDAL assessment with the location-allocation permit (*Penetapan Lokasi*).

With the project's inclusion as National Strategic Project as stipulated within PP No. 109/2020, current regulation requires different process of AMDAL through Kegiatan Kesesuaian Pemanfaatan Ruang ("KKPR") document, which is still processed by GCA.

6. Land Acquisition and Resettlement Action Plan

- GCA completed Land Acquisition Planning Document on November 2023.
- All planned areas for the project have been acquired by GCA, through Local Council of Public Works and Housings, Special Region of Yogyakarta in 2022.
- Any other permit requirement during construction and operation will be undertaken by SPC.

7. Project Cost Structure

Based on Final Business Case, the project cost structure will be as follow:

Estimated Project Cost	USD 21.9 – 23.7 Million
Indicative Debt to Equity Ratio	13,73 %
- Debt Level	70%
- Equity Level	30%
IRR	15 %
NPV	Under Calculation

8. Government Support and Guarantee

- Project Development Facility ("PDF") by Ministry of Finance, through the assignment of PT SMI (Persero) as PDF Executor to assist GCA in Project Preparation and Transaction.
- Guarantee support from PT PII (Persero).
- Viability Gap Fun support from Ministry of Finance.

9. Contact Information

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Yogyakarta Special Region

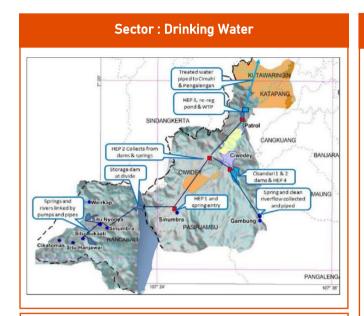
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Development of Sinumbra Regional Water Supply System

Location: West Java



Government Contracting Agency:

Governor of West Java Province

Type of PPP:

Unsolicited

Return of Investment:

User Charge (Take or Pay)

Sub-Sector: Water Supply System

Description:

The Greater Bandung Metropolitan Regional Water Supply Project West Region-1 Sinumbra (Sinumbra Water Supply) is a Drinking Water Supply System that will supply bulk water to western parts of the Bandung Metropolitan area with a capacity of 1,200 Liters/second to serve 120,000 house connections. The Sinumbra Regional Water Supply System supplies water from 3 springs in Sinumbra Plantation at 1,300-1,428 m asl to Metropolitan Bandung Area (approx. 700 m asl).

Estimated Project Cost: USD 49.69 Million

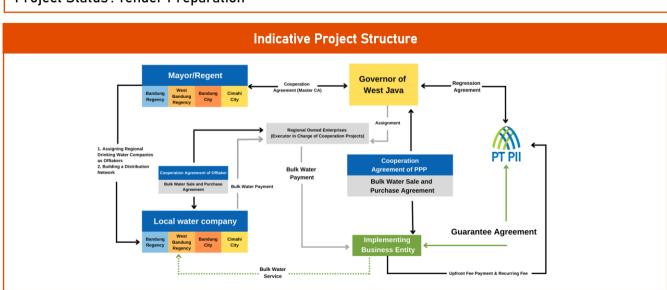
Financial Feasibility:

IRR : 12.56%

NPV : USD 21.62 Million

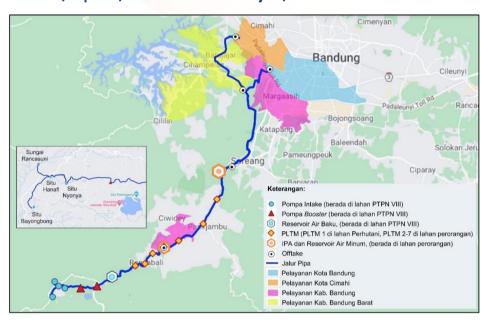
Estimated Concession Period: 2 years construction and 35 years operation.





Project Title	Development of Sinumbra Water Supply System
Government Contracting Agency	Governor of West Java Province
Implementing Agency	PT. Tirta Jabar (PT. Tirta Gemah Ripah)
Preparation Agency	PT. Waskita Karya Infrastruktur and PT. Tirta
	Anugrah Utama
Project Cost	USD 49.69 Million
Estimated Concession Period	2 years construction and 35 years operation
Location	Bandung, West Java

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Sinumbra Water Supply

2. The Opportunity

2.1. Project Background

Based on the National Medium-Term Development Plan (RPJMN) for 2020-2024, the Government targets to fulfill 100% of housing with access to safe drinking water and 30% of housing with piped water access. In 2019, access to safe drinking water has reached 89.27% and the coverage of piped drinking water services by Water Company is 22.91%. To fulfill drinking water needs, especially in Metropolitan Bandung Raya, it is planned to develop SPAM Regional Metropolitan Bandung Raya Barat-1 (Sinumbra) by utilizing raw water sources from several springs and rivers in the Sinumbra tea plantation area, Bandung Regency which has a debit potential of 3,000 liters/second.

The Sinumbra Regional Water Supply will serve Bandung Regency, West Bandung Regency, Cimahi City, and Bandung City, and is included in the Regional Water Supply criteria so that it is the responsibility of the West Java Provincial Government in preparing the development plan of the Sinumbra Regional Water Supply. The number of priorities that must be met by the Government is one of the obstacles in the development of water supply. Therefore, a breakthrough is needed in terms of the obligation to provide basic infrastructure, one of the alternative solutions is through the Public Private Partnerships (PPP) scheme.

2.2. Project Description

The description of this project is as follows:

Project Name : Sinumbra Water Supply

Project Location : West Java

Project Method : Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT)

Financing scheme : Public Private Partnership
Government Contracting Agency : Governor of West Java Province

Concession : 37 years (including 2 years construction)

2.3. Project Objectives

The objective of Sinumbra Water Supply is to reduce the gap in drinking water supply shortages in the Greater Bandung Metropolitan area, utilize raw water sources to serve Local water company's or the Regional Government of Bandung City, Cimahi City, Bandung Regency, and West Bandung Regency regionally, and improve drinking water services for ± 580,000 residents through 120,000 new Home Connections.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

Project scope is as follows:

- Build intakes in 3 springs, and produce raw water with a treatment plant and distributing water to 4 offtake reservoirs.
- 2. The Governor of West Java Province acts as the Government Contracting Agency to sign the PPP Agreement with the Implementing Business Entity. The PPP agreement is a cooperation agreement with the Design Build Finance Operate Maintainance Transfer (DBFOMT) grand scheme covering Design, Build, Finance, Operate, Maintain, and Transfer (DBFOMT) for bulk water production units for 30 years concession period granted to Business Entities. Executor.
- 3. The Implementing Business Entity supplies Bulk Water Supply to 4 (four) Off takers.
- 4. The Governor of West Java Province assigned the Regional Owned Enterprises of West Java Province (PT. Tirta Gemah Ripah) to act as the Implementing Government Contracting Agency for financial and operational activities, including but not limited to payment of Government Contracting Agency Financial Obligations to Implementing Business Entity and collectors of Local water company Off takers payments to Government Contracting Agency.
- 5. In organizing the Sinumbra Regional Water Supply System Project, the Governor of West Java Province signed a Regress Agreement with Indonesia Infrastructure Guarantee Fund (IIGF);
- 6. Indonesia Infrastructure Guarantee Fund (IIGF). then signed a Guarantee Agreement with the Implementing Business Entity to obtain guarantees for the termination and default of the Project;

4. Technical Specification

The technical specifications for Sinumbra Water Supply System are as follows:

No.	Component	Design Criteria and Technical Specifications	
1.	System Capacity	1.250 L/sec	
2.	Water Loss	50 L/sec (3%-4%)	
3.	Bulk Water Sales	1.200 L/sec	
4.	Pipe		
	- Standard	ISO, SNI, Ministerial Regulation PU No.18/2007	
	- Flowing capacity	Q maximum (1,1 Average requirement)	
	- Flow speed	0,3 m/sec (min); 2 m/sec (max)	
	- Type	Option: HDPE (PE 100), DCIP, dan GRP	
	- Class	Minimum PN 10, with telescopic design	
	- Connection	Weld, socket, spigot	
	- Water hammer	According to needs / planning, especially for pumping lines and Mini	
		Hydro Power Plant pipelines	
5.	Pump		
	- Standard	ISO, SNI, DN	
	- Type	Negative Suction + Self Priming or positive Suction + dry pit	
	- Redundancy	N + 1 (1 = standby unit)	

6.	WTP	
	- Processing unit	Rapid sand filter (RSF) and chlorination
	- RSF Type	Options: gravity with an open tub/tank, pressure with a closed tub/tank, or a continuous sand filter
	- Filtration speed	15- 20 m/hour
	- Chlorination type	Using chlorine gas
7.	Reservoir	
	- Type and material	Tank (glass to Steel, with mild steel roof) or concrete with K300
	- Capacity	Raw water reservoir: 7 hours* (30,000 m³) Clean water reservoir: 2 hours (10,000 m³)
8.	Automation System	SCADA (Supervisory Control and Data Acquisition) and online monitoring, with human machine interface (HMI) control room
9.	Real Time Monitoring	Residual chlorine, pH, turbidity, pressure and water flow
10.	Building construction	SNI 2847:2019 concerning Requirements for Structural Concrete for Buildings; SNI 03-6764 -2002 concerning Structural Steel Specifications; SNI 03-6861.2-2002 concerning Specifications of Building Materials; SNI 2052-2017 concerning Concrete Reinforcement

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The scope of the area that will be included in the EIA study is the environmental area affected by the Sinumbra Regional Water Supply System Project which includes the location of the intake of raw water sources, booster pumps, raw water reservoirs, Mini-hydro Power Plants, Water Treatment Plants, clean water reservoirs, and piping network.

6. Land Acquisition and Resettlement Action Plan

In accordance with the regulations, land acquisition for PPP projects is the government's obligation through the Government Contracting Agency. The land acquisition required for the Sinumbra Regional Water Supply System Project is based on the identification of limited project locations needed for Mini-hydro Power Plants, Water Treatment Plants, clean water reservoirs, and pipelines.

7. Project Cost Structure

Estimated Project Cost	USD 49.69 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	12.56%
NPV	USD 21.62 Million

8. Government Support and Guarantee

- Land acquisition for the construction of the Sinumbra Regional Water Supply System, including the transfer of State-Owned Enterprises assets (Nusantara Plantation Public Company VIII and State Forestry Public Company).
- 2. Granting permission to plant pipelines using the open cut method.
- 3. Development of downstream components or distribution networks so that the target of absorption of bulk water by off takers for 2 (two) years can be achieved.
- 4. Revitalization of Situ-Situ located around the location of raw water sources/intakes in the Sinumbra Tea Plantation area (Nusantara Plantation Public Company VIII) in order to increase the safety of raw water in the future (30 years).

The Sinumbra Regional Water Supply System PPP project requires a Government Guarantee for the fulfillment of the Government Contracting Agency 's financial obligations caused by risks, including the following:

- 1. Delays in obtaining licenses or approval permits.
- 2. Changes in laws and regulations.
- 3. Violation of the project agreement.
- 4. There is no integration with the downstream distribution network (delays in the absorption of bulk water).
- 5. Risks from competing facilities or infrastructure or the emergence of restrictions or changes from the Government Contracting Agency to the agreed service coverage for reasons of matters related to other Cooperation Projects.
- 6. The non-implementation of tariff adjustments in accordance with the agreed plan in the financial analysis, resulting in reduced Implementing Business Entity profits and/or cash flow due to the difference in payments between the Government Contracting Agency and each off taker.
- 7. Risk of takeover
- 8. Risk of default by Government Contracting Agency.
- 9. Prolonged political events.
- 10. Prolonged force majeure.
- 11. Government Contracting Agency unilaterally decides to take over the Project and terminate the PPP Agreement.

In principle, the business entity submits a risk proposal guaranteed by the Government against the risk of default and termination.

9. Contact Information

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Email: airminum.disperkim@jabarprov.go.id



Ir. H. Djuanda Regional Water Supply (Jatiluhur II)

Location: DKI Jakarta and West Java Province



Government Contracting Agency:

Upstream phase: Minister of Public Works and Housing Downstream phase: Head of Province/Regency/City

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Water Supply System

Description:

Ir H Djuanda (Jatiluhur II) project aims to improve water access and service to the public through applying the end-to-end method (construction from upstream to customer connections). Ir. H. Djuanda Water Supply has a production capacity of 6,790 lps, with a raw water capacity around 7,000 lps. The project will serve 4 areas, that consist of: DKI Jakarta (2,054 lps), Bekasi City (1,051 lps), Bekasi Regency (1.371 lps) & Bogor Regency (2.012 lps).

Estimated Project Cost: USD 1,144.12 Million

Financial Feasibility:

Upstream Phase

IRR: 10.7%

NPV: USD 32.84 Million

Downstream Phase - DKI Jakarta

IRR: 11.9%

NPV: USD 22.43 Million

Downstream Phase - Bekasi City

IRR: 11.8%

NPV: USD 12.50 Million

Downstream Phase - Bekasi Regency

IRR: 12.1%

NPV: USD 27.831 Million

Downstream Phase - Bogor Regency

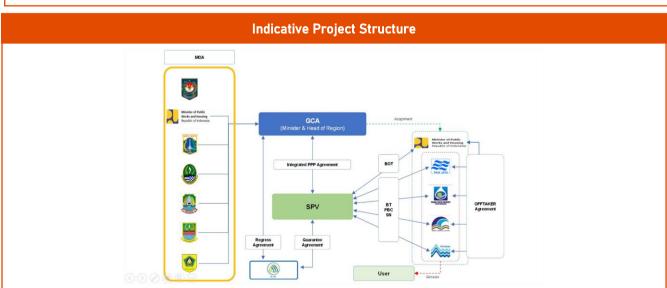
IRR: 11.7%

NPV: USD 26.82 Million

Estimated Concession Period: 30 years including 2 years of

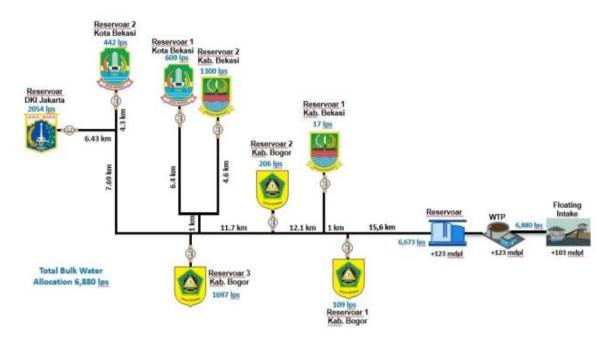
construction (2 phases)

Indicative Project Schedule PreQualification Q3 2023 Project Status: Feasilility Study Evaluation Indicative Project Schedule Agreement Signing Q2 2024 Q2 2024 Financial Close Q4 2024 Construction Q2 2026 - Q4 2028



Project Title	Ir. H. Djuanda Water Supply (Jatiluhur II)
Government Contracting Agency	Upstream phase: Minister of Public Works and
	Housing
	Downstream phase: Head of
	Province/Region/City
Implementing Agency	Directorate General of Infrastructure Financing
Preparation Agency	Maynilad, Metropac, Varsha, PT PP Persero Tbk,
	and Ranhill (MMVP) Consortium
Project Cost	USD 1,144.12 Million
Estimated Concession Period	30 years including 2 years of construction
Location	DKI Jakarta and West Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Ir. H. Djuanda Water Supply

2. The Opportunity

2.1. Project Background

SPAM Ir. H. Djuanda/Jatiluhur II will used 7.000 lps of raw water from the Jatiluhur Reservoir in Purwakarta Regency, West Java Province. This system will produce 6.673 lps of clean water. Bulk water will be distributed in the areas of DKI Jakarta, Bekasi City, Bekasi Regency, Bogor Regency.

This project is an integration of two different project scopes. The upstream scope is the construction of intake units, treatment plant and water distribution units. The upstream project GCA is the Minister of Public Works and Housing and using a BTO contract. The downstream scope includes the construction of downstream piping networks, new house connections and piping maintenance. The downstream GCA is the regional head of offtaker. The partnership will use Performance-Based Contract and Trade Credit Contract (Build Transfer).

The Project's goal is to expand the water service by 5% for DKI Jakarta, 10% for Bekasi City, 11% for Bekasi Regency, and 9% for Bogor Regency. The payment mechanism is "take and pay".

2.2. Project Description

Ir H Djuanda (Jatiluhur II) project aims to improve water access and service to the public through applying the endto-end method (construction from upstream to customer connections).

Ir. H. Djuanda Water Supply has a production capacity of 6,673 lps, with a raw water capacity around 7,000 lps. The project will serve 4 areas, that consist of: DKI Jakarta (2,054 lps), Bekasi City (1,051 lps), Bekasi Regency (1.371 lps), and Bogor Regency (2.012 lps).

2.3. Project Objectives

The objectives of Ir. H. Djuanda Water Supply are as follows:

- Expanding the water service area by 5% for DKI Jakarta, 10% for Bekasi City, 11% for Bekasi Regency, and 9% for Bogor Regency;
- Increasing the economic activity;
- Improving public health by providing drinking water;
- This project also doesn't burden the Government budget because this is an unsolicited project.

3. Business Entity's Scope of Work

- Upstream scope: design, build, finance, operate, maintain, and at the end of the cooperation period hand over all the facilities that have been built to the upstream phase GCA. The Upstream Scope is carried out through a DBFOMT Contract.
- Downstream scope: design, build, finance, improve distribution networks, provide new connections, maintain, and at the end of the cooperation period, the SPV will hand over all the facilities that have been built to the downstream phase GCA. The downstream scope is carried out through Performance-Based Contracts and Trade Credit Contracts.

4. Technical Specification

- Upstream scope: Intake, Water Treatment Plant (WTP), WTP Reservoir, Distribution Pipe for Raw Water, and Distribution Pipe for Bulk Drinking Water.
- Downstream scope: Distribution Reservoir, Main Distribution Network Pipeline, and Distribution Pipe.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

According to the AMDAL study on the feasibility study document, here are main points that must be considered in the development of Ir. H. Djuanda Water Supply in upstream area:

- The project scope regarding raw water raw water abstraction and water production is categorized as AMDAL Mandatory Type B activity because raw water abstraction from the dam is more than 250 lps (7,000 lps).

As for the downstream scope, here are main points must that be considered in the development of Ir. H. Djuanda Water Supply according to the AMDAL study on the feasibility study document:

- The project scope regarding the construction of the distribution network is categorized as AMDAL Mandatory Type B activity because the total length of the planned distribution pipeline is 63 km long.
- The project scope regarding the construction of the transmission network is categorized as Amdal Mandatory
 Type C activity because the total length of the planned transmission pipeline is more than 120 km long.

6. Land Acquisition and Resettlement Action Plan

Following the discussions between stakeholders, the location of land for intake development belongs to the Ministry of Public Works and Housing. In addition, the land for some downstream areas such as in DKI Jakarta, Bekasi Regency, and Bogor Regency, are already owned by The Regency/City Government, hence, no land acquisition is required. However, the Bekasi City Government may need to acquire the required land for their downstream area.

7. Project Cost Structure

Estimated Project Cost	USD 1,144.12 Million				
Indicative Debt to Equity Ratio					
- Debt Level	70%				
- Equity Level	30%				
	Upstream Downstream				
	-	DKI Jakarta	Bekasi	Bekasi	Bogor
			City	Regency	Regency
IRR	10.7%	11.9%	11.8%	12.1%	11.7%
NPV (USD Million)	32.84 22.43 12.50 27.83 26.82				

8. Government Support and Guarantee

The project needs a government guarantee through PT PII, mainly to mitigate these risks:

- Delay or failure to obtain licenses, permits and approvals;
- Changes in statutory regulations;
- Violation of project agreements;
- Risks from competing facilities / infrastructure;
- Tariff risk;
- Expropriation risk;
- Sub-sovereign risk;
- Force Majeure risk.

Note: The detailed risk coverage of the Djuanda Water Supply Project will be reviewed and consulted with PT PII.

9. Contact Information

Name : Annisa Dian Pratiwi

Position : Head of Sub-directorate of Investment Plan Legalization, Directorate General of Infrastructure

Financing, Ministry of Public Works and Housing

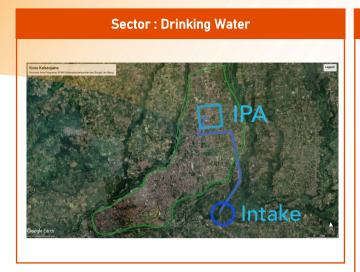
Phone : +62 811-943-848

Email: annisa.pratiwi@pu.go.id



Lau Biang/Lau Dah (Karo) Water Supply System

Location: Karo District, North Sumatera Province



Government Contracting Agency:

Director of Perumda Air Minum Tirta Malem

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Water Supply System

Description:

Lau Biang/Lau Dah Drinking Water Supply System is planned to provide clean water services in Karo Regency and expand services to the Kabanjahe City area.

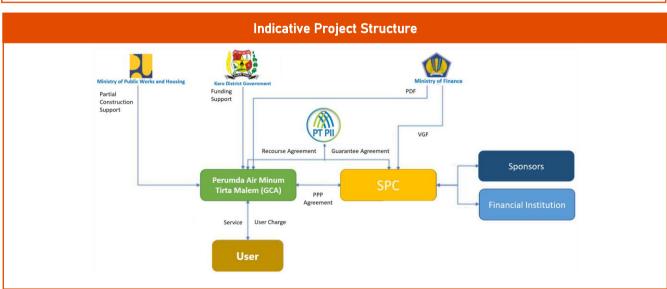
Estimated Project Cost: USD 7.68 Million

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

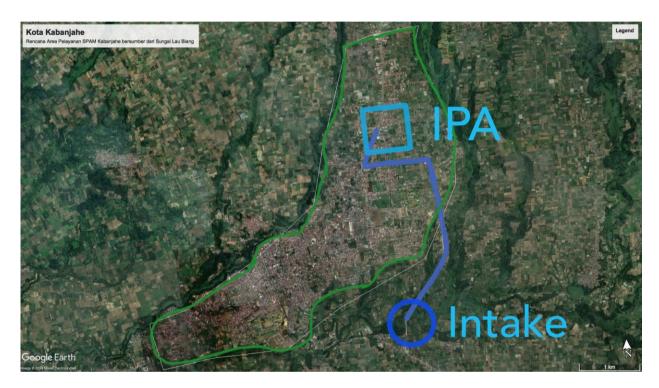
Estimated Concession Period: Under Review





Project Title	Lau Biang/Lau Dah (Karo) Water Supply System
Government Contracting Agency	Director of Perumda Air Minum Tirta Malem
Implementing Agency	Perumda Air Minum Tirta Malem
Preparation Agency	Perumda Air Minum Tirta Malem
Project Cost	USD 7.68 Million
Estimated Concession Period	Under Review
Location	Karo District, North Sumatera Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Map of Kabanjahe City

2. The Opportunity

2.1. Project Background

One of the priorities for the development of service infrastructure listed in the 2020-2024 National Medium-Term Development Plan (RPJMN) is the provision of access to proper and safe drinking water and sanitation for the community. The current conditions show that only about 20.14% of access to piped drinking water can be reached by the community from the total national target of 10 million House Connections (SR). This condition is not only influenced by the minimum performance and capacity of SPAM implementation on the upstream side, but is also influenced by the minimum level of awareness and willingness of the public to pay for water which has so far been considered a product of the outdoors.

At the regional government level, achievement targets have been set for integrating national drinking water infrastructure development priorities as stated in the Karo Regency Regional Medium-Term Development Plan (RPJMD) for 2022-2026, namely through expanding the scope of SPAM services by upgrading or building new ones as well as managing assets in an integrated manner. effective in reducing the level of Non-Revenue Water (NRW) to below 25%.

Drinking water services in the city of Kabanjahe have experienced problems since PDAM Tirta Malem was established in 1990. Poor governance caused the company to suffer losses and ultimately the quality of clean water

services decreased and service coverage was unable to catch up with the growth of the city of Kabanjahe. PDAM Tirta Malem customers receive a rotating supply of water, and several customer zones have their services stopped because the water supply is insufficient because they only rely on water sources that flow by gravity. In 2022, most Kabanjahe residents, including PDAM Tirta Malem customers, rely on providing clean water from deep wells independently or buying water from clean water retailers at a price of 30,000/m3.

To increase the availability of affordable piped water for the community, the Government of Karo Regency has made improvements to governance at PDAM Tirta Malem, including imposing an FCR (Full Cost Recovery) rate since December 2022 which was adjusted from the old rate of Rp. 1,250/m3 to Rp. 6,000/m3. The tariff adjustment was made so that the energy costs for pumping water from SMA, which has a lower position than Kota Kabanjahe, can be met. At this time there is only one WTP facility available with a capacity of 50 l/d and PDAM Tirta Malem only serves active and inactive subscribers of 12,000 RTs out of 23,000 RTs in Kabanjahe.

2.2. Project Description

The description of this project is as follows:

Project Name : Lau Biang/Lau Dah (Karo) Water Supply System

Project Location : Karo District, North Sumatera Province

Project Method : Design - Build - Finance - Operate - Maintenance - Transfer (DBFMOT)

Estimated Cost : USD 7.68 Million

The plan for implementing SPAM in Karo Regency is mainly based on the still low performance of PDAM and the minimal coverage of piped drinking water services in this area. This is caused by the continued increase in demand by the people in the Karo Regency area for the provision of access to proper drinking water, but the level of service and development of the existing drinking water supply has not been able to meet this need. Based on the Preliminary Study of the Project (2021), it is known that the coverage of piped water services in Karo Regency is currently only 13.72% of the total population of 404,998 people.

Thus, it can be concluded that there is still a gap between the provision and service of drinking water and the needs of the people of Karo Regency. Therefore, the construction of a SPAM is a crucial step for the local government to meet the increasing needs of the community.

2.3. Project Objectives

The construction of SPAM Kabanjahe by utilizing water sources from the Lau Biang River is aimed to meet the community's need for quality, quantity and continuity of clean water that is affordable and can be realized according to the RPJMN target.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

4. Technical Specification

Project technical specification will be further studied during the OBC/FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC report.

6. Land Acquisition and Resettlement Action Plan

The land will be procured by the GCA and the detailed plan will be provided the OBC/FBC report (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	USD 7.68 Million
Indicative Debt to Equity Ratio	
- Debt Level	Under Calculation
- Equity Level	Under Calculation
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

The Preliminary Study of the project indicates the need for government supports which will be further analyzed in the OBC/FBC report.

9. Contact Information

Name : Jusup Sukatendel

Position : Plt. Director of Perumda Air Minum Tirta Malem

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Development of Jatigede Regional Water Supply System

Location: West Java Province

Sector: Drinking Water Programme Annual Ann

Government Contracting Agency:

Governor of West Java and will be mandated to Director of PT Tirta Jabar (PT Tirta Gemah Ripah)

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Water Supply System

Description:

The Jatigede Water Supply Project is designed to address the growing water demand in West Java by increasing the water supply capacity. The project serves as a water source for five regional areas: Sumedang Regency, Majalengka Regency, Cirebon Regency, Indramayu Regency, and the City of Cirebon. The project aims to provide a drinking water capacity of 2,000 liters per second (lps) at Kadipaten in Majalengka Regency. This increased capacity will ensure a reliable and sufficient water supply to meet the needs of the communities in the respective regions.

Estimated Project Cost: USD 139.69 Million

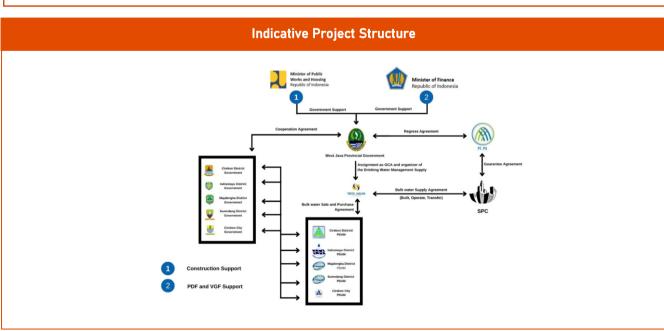
Financial Feasibility:

IRR : 15%

NPV : USD 4.39 Million

Estimated Concession Period: 30 years

Indicative Project Schedule Final Business Case Q1 2023 Project Status: Final Business Case Project Status: Final Business Case Indicative Project Schedule Agreement Signing Q2 2024 Q3 2024 Construction Q3 2025 Construction Q3 2025



Project Title	Construction of Jatigede Regional Water Supply System
Government Contracting Agency	Governor of West Java hand over the authority to
	Director of PT Tirta Jabar (PT Tirta Gemah Ripah)
Implementing Agency	PT Tirta Jabar (PT Tirta Gemah Ripah)
Preparation Agency	PT. Sarana Multi Infrastruktur (PDF assignment by
	the Ministry of Finance)
Project Cost	USD 139.69 Million
Estimated Concession Period	30 years
Location	West Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Jatigede Water Supply System

2. The Opportunity

2.1. Project Background

The implementation of regional Water Supply is one of the efforts for a more efficient and adequate water supply in terms of technical and economic aspects. In addition, the limited funding sources for the water supply implementation would be carried out through the Public Private Partnership scheme.

Jatigede Regional Water Supply is a National Strategic Project, where the governments both central and regional will coordinate and establish a series of policies to accelerate the implementation of the project.

2.2. Project Description

The service area for Jatigede regional water supply are as follows:

- Sumedang Regency;
- Majalengka Regency;
- Cirebon sub Regency;
- Indramayu Regency; and
- Cirebon city

Jatigede regi<mark>onal water supply will be implemented</mark> by the DBFOMT mechanism. The scope of activities that will be cooperated for the Jatigede Regional Water Supply include:

- Special Purpose Company sell treated water (bulk water) to PDAM through GCA using the 'take or pay' method;
- Target Area: Sumedang sub district, Majalengka sub district, Indramayu sub district, Cirebon sub district, Cirebon city;
- Water treatment plant phase I: 3 x 500 lps;
- Main distribution network: 56.3 km;

The distribution reservoir has three locations at each off-taker (Tomo, Jatitujuh, and Jatiwangi). WTP will be located in Kadipaten. The production capacity of 1,500 lps consists of 3 WTPs with a capacity of 500 lps. Each WTP consists of processing units: coagulation, flocculation, sedimentation and filtration. The construction phase is planned to be carried out in 2020 for three years and will start operating in 2022.

2.3. Project Objectives

The objective of Jatigede Water Supply is to provide clean water services to the community in the service area.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer Roles and responsibilities of business entity are as follows:

- 1. To build and manage Water Treatment Plants and ensure low water production losses;
- 2. To build and manage bulk water transmission pipeline, ensure low water losses on the transmission unit, and perform maintenance of transmission pipelines;
- 3. To build, manage, and maintain distribution reservoirs, including the main water meter.

4. Technical Specification

The technical specifications for Jatigede Regional Water Supply are as follows:

No.	Description	Capacity
ı	Intake	
	1. Construction	Reinforced Concrete
	2. Pump capacity	3 x 550 lps
II	Water Treatment Plant	
	1. Construction	Reinforced Concrete
	2. Capacity	3 x 550 lps
Ш	Transmission Pipe	
	1. Capacity	1,500 lps
	2. Maximum Pressure	60 – 80 m water column
	3. Minimum Pressure	5 – 10 m water column
IV	NRW	
	1. Intake	2%
	2. Production Facilities	5%
	3. Transmission Pipeline	1-2%
٧	Operation time	24 hours/day
VI	Water Quality	Minister of Health Regulation No. 49/2010 and WHO Guidelines for Drinking Water Quality, 2011
VII	Material Standard	Indonesia: SNI International: ISO, JIS, AWWA, ASTM, ANSI, DIN, BS
VIII	Continuity of supply	Indonesia: SNI International: ISO, JIS, AWWA, ASTM, ANSI, DIN, BS
	1. The average duration of the termination	1 hour in 24 hours
	2. Termination of operations for maintenance	2 days in 365 days
	3. Termination of operations due to electrical interference	1 day in 365 days
IX	Monitoring system	SCADA
	Centralized automatic system	
	2. Meter system	
	3. Communication system	

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Until June 2018, the Housing and Settlement Agency is completing an Environmental Impact Assessment (AMDAL) for the PPP Project of Jatigede Regional Water Supply. In OBC document explained that due to a change in location and a large capacity of 2,000 lps of the Intake, the Agency needs to revise the AMDAL of Jatigede Regional Water Supply and propose the environmental permit from the West Java Governor.

6. Land Acquisition and Resettlement Action Plan

In Jatigede Regional Water Supply, the initial identification of the project development intake location, transmission pipeline, and the reservoirs is as follows:

No	Land Purpose	Land Area (ha)	Land Ownership	Contract /Land Acquisition Method
1.	Intake located in Cilutung	0.89 ha	Owned by BBWS Cimanuk- Cisanggarung	West Java Provincial Government as GCA, get from BBWS Cimanuk- Cisanggarung
2.	Raw water Transmission Pipeline	4.58 ha	Owned by BBWS Cimanuk- Cisanggarung, National road, villageand community land	West Java Provincial Government as GCA, get from BBWS Cimanuk- Cisanggarung, Bina Marga, and acquiring village and community land
3.	WTP Located in Kadipaten (including reservoir)	5.03 ha	Owned by West Java Provincial Government	
4.	Pipeline (from WTP to each reservoir)	Total area 20.42 ha	2.74 will be placed on Inspeksi irigasi road 0.84 will be placed on Rumija Toll land	Inspeksi irigasi road: permit for utilization of roads from the MoPWH and a lease agreement with the MoPWH. Rumija Tol: Permit for utilization of roads from the PT. Lintas Marga Sedaya.
5.	Tomo Reservoir	0.09 ha	Owned by Sumedang sub-district	Built on Sumedang's LG land.
6.	Jatiwangi Reservoir	0.09 ha	Owned by Majalengka sub-district	Built on Majalengka's LG land.
7.	Jatitujuh Reservoir	0.12 ha	Owned by Majalengka sub-district	Built on Majalengka's LG land.
8.	Jatibarang Reservoir	0.12 ha	Owned by Indramayu sub-district	Built on Indramayu's LG land.
9.	Krangkeng Reservoir	0.16 ha	Owned by Indramayu sub-district	Built on Indramayu's LG land.
10.	Babadan Reservoir	0.08 ha	Owned by Cirebon sub- district	Built on Cirebon's LG land.
11.	Kepompongan Reservoir	0.25 ha	Owned by Cirebon city	Built on Cirebon city's LG land.

7. Project Cost Structure

Estimated Project Cost	USD 139.69 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	15%
NPV	USD 4.39 Million

8. Government Support and Guarantee

The project is indicated to require government support in the form of fiscal and non-fiscal. Government support includes VGF from the Ministry of Finance, Government Guarantee from PT PII, and Technical Support from the Ministry of Public Works and Housing.

9. Contact Information

Name : Dr. Indra Maha, S.T., M.T.

Position: Head of West Java Province Housing and Settlement Department

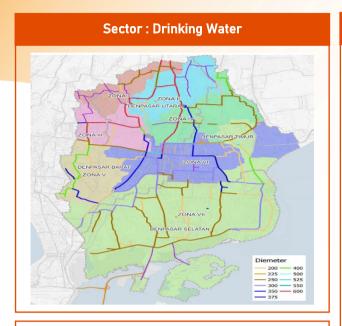
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Development of Denpasar City Water Supply System

Location: Denpasar City, Bali Province



Government Contracting Agency:

Mayor of Denpasar City

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Water Supply System

Description:

The amount of water loss (NRW) is quite large, namely 40.43%, so that the benefits felt by customers are not optimal. In addition, the current population of Denpasar City who uses drinking water from the Regional Company of Denpasar City is only around 67.84% or 89,126 customers (Domestic & Non-Domestic), the rest prefer to use drilled wells.

Estimated Project Cost:

Option 1: USD 20.86 Million (Non-Drinkable)
Option 2: USD 55.09 Million (Drinkable)

Financial Feasibility:

Option 1 (Non-Drinkable)

IRR : 14.80%

NPV: USD 6.89 Million Option 2 (Drinkable)

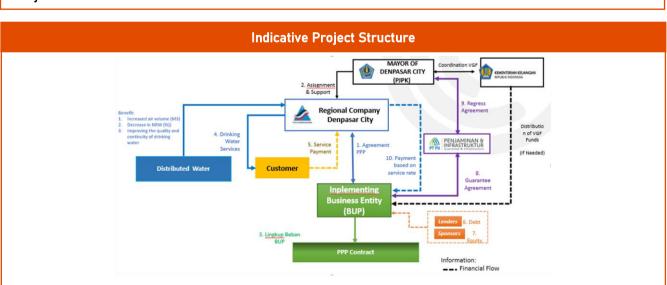
IRR: 18.12% (without VGF)

14.21% (with VGF)

NPV : USD 21.55 Million

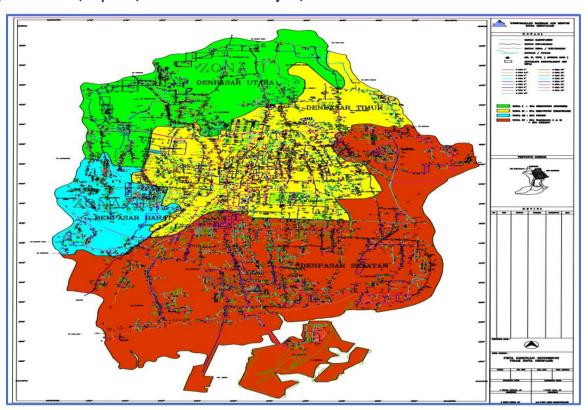
Estimated Concession Period: 4 years.





Project Title	Development of Denpasar City Water Supply System
Government Contracting Agency	The Mayor of Denpasar City
Implementing Agency	Tirta Sewaka Dharma Regional Public Company Denpasar City
Preparation Agency	Tirta Sewaka Dharma Regional Public Company Denpasar City
Project Cost	Option 1: USD 20.86 Million (Non-Drinkable)
-	Option 2: USD 55.09 Million (Drinkable)
Estimated Concession Period	4 years construction and 16 years operation
Location	Denpasar City, Bali Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Development of the Drinking Water Suplly System for the City of Denpasar

2. The Opportunity

2.1. Project Background

The percentage of piped drinking water services by Perumda Denpasar City in 2021 is 67.84% or as many as 449,702 people who been served out of 725,134 residents of Denpasar City. The number of domestic connections was 86,411 and 2,715 non-domestic connections. The total connection is 89,126 or equivalent to 1,777,374 M3. The length of the Denpasar City Perumda distribution pipeline network is approximately 1,675,661 m, with pipe diameters between 4'' – 24'' where most of the pipes are of the ACP type. The pipe is over 30 years old, which was installed from 1975-1993. The water loss rate which reached 40,43% in 2021 has increased by 1,67% from the previous year. The condition of surface water which has been intruded with sea water, the difficulty of permitting use of deep water (drilled wells) and the low ABT tariff compared to the Denpasar City Perumda tariff has implications for Perumda to be able to develop its service area, improve the quality,

quantity and continuity of service so that it can meet water needs and become a proper drinking water for the people in Denpasar City.

2.2. Project Description

The description of this project is as follows:

Project Name : Development of Denpasar City Water Supply System

Project Location : Denpasar City, Bali Province

Project Method : Design- Build- Finance - Maintenance - Transfer

(D-B-F-M-T)

Project Area : 7 Zone

Estimated Cost : Option 1: USD 20.86 Million (Non-Drinkable)

Option 2: USD 55.09 Million (Drinkable)

Financing scheme : Public Private Partnership
Government Contracting Agency : Mayor of Denpasar City

Concession : 20 Year (4 years construction and 16 years operation)

2.3. Project Objectives

The development of a drinking water system in Denpasar City aims to reduce the level of water loss (NRW), which is currently around 40,43%. This development is carried out by replacing pipes and drinking water networks through the D-B-F-M-T (Design-Build-Finance-Maintenance-Transfer) scheme with a user charge return scheme. With the development of drinking water areas, improving the quality, quantity and continuity of services can meet the needs of proper drinking water for the people in Denpasar City.

3. Business Entity's Scope of Work

Design-Build-Finance - Maintenance - Transfer Project

The scope is as follows:

- 1. Production Units
 - a. Improvement of IPA and drilled wells
 - b. Monitoring and controlling the Prime Drinking Water Zone (ZAMP) to Improve the quality of drinking water, quanity and continuity of service
- 2. Distrubution and service unit
 - a. Revitalization of water loss reduction (NRW) assets
 - Formation and Improvement of Zoning and NRW Control
 - Development of District Meter Area (DMA)
 - Rehabilitation of Distribution Networks, Primary, Secondary and tertiary (ACP and PVC pipes with
 - Service pipe rehabilitation
 - b. Distribution Unit Development (Expansion of services
 - Plan to build 2 units of Reservoir Kap. 5000 M3 (West Denpasar Zone 5 and South Denpasar Zone 7) and 1 unit of Reservoir on Jln. Gunung Mas (Denpasar Barat Zone- 3) Kap. 3000 M3.
 - Expansion of the distribution network/development of new service areas.
- Maintenance and maintenance of pipeline networks, reservoir buildings and monitoring system equipment are collaborated.
- 4. Maintain the service quality of the drinking water development system according to the agreed standars.
- 5. Transfer of assets and transfer of knowledge at the end of the cooperation period according to PPP Agreement

4. Technical Specification

The technical specifications Development of Denpasar City Water Supply System are as follows:

No	Facilities	Capacity
1	Pipe Rehabilitation	- Option 1: 35.739 Meter (Non-Drinkable) - Option 2: 1.457.849 Meter (Drinkable)
2	Zoning Block System	40 unit
3	Non Revenue Water (NRW) reduction	15,47 %

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The documents will be prepared by the Special Purpose Company.

6. Land Acquisition and Resettlement Action Plan

The land will be procured by the GCA and the detailed plan will be provided the OBC/FBC report (before the procurement of business entity).

7. Project Cost Structure

Option 1 (Non-Drinkable)

Estimated Project Cost	USD 20.86 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	14.80%
NPV	USD 6.89 Million

Option 2 (Drinkable)

Estimated Project Cost	USD 55.09 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	14.21%
NPV	USD 21.55 Million

8. Government Support and Guarantee

Outline business case study indicates the government support options for this project, namely Viability Gap Fund (VGF).

9. Contact Information

Name : Ida Bagus Gede Arsana, ST

Position : Director of the Regional Public Company Tirta Sewaka Dharma

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Revitalization of Non-Revenue Water in Sukabumi City

Lokasi: Sukabumi City, West Java



Government Contracting Agency:

Director of Perumda TBW of Sukabumi City

Type of PPP:

Solicited

Return of Investment:

Under review

Sub-Sector: Water Supply System

Description:

Regional Public Water Company Tirta Bumi Wibawa Sukabumi City. Regional owned enterprise engaged in the distribution of clean water to the general public. Non-Revenue Water Revitalization Planning in the Cinumpang, Cigadog and Batu Karut Systems to provide maximum drinking water services to the community. The scope of this project is to design, build, finance, operate, maintain supporting infrastructure.

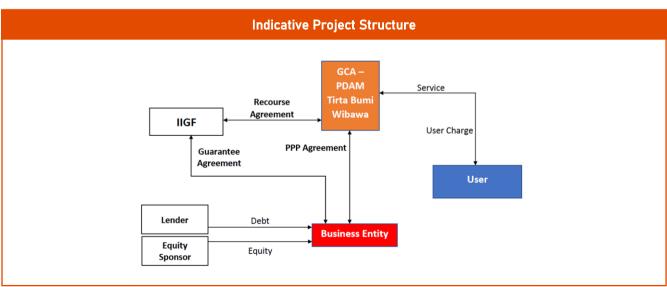
Estimated Project Cost: Under Calculation

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

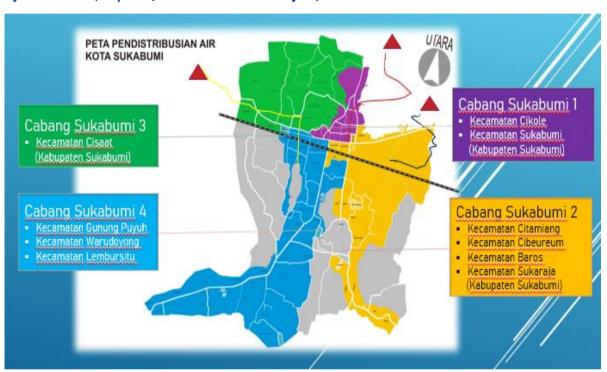
Estimated Concession Period: Under Review





Project Title	Revitalization of Non-Revenue Water in Sukabumi City
Government Contracting Agency	Director of Perumda TBW of Sukabumi City
Implementing Agency	Perumda TBW of Sukabumi City
Preparation Agency	Perumda TBW of Sukabumi City
Project Cost	Under Calculation
Estimated Concession Period	Under Review
Location	Sukabumi City, West Java

1. Project Picture (Map and/or Illustration of Project)



Gambar 1 - Map of Sukabumi City Water Distribution

2. The Opportunity

2.1. Project Background

Based on data for October 2022, PDAM Tirta Bumi Wibawa, Sukabumi City has service coverage of 14.95%. Apart from the amount of service coverage, there are 4 sub-districts that have an average service time of under 8 hours. Therefore, in order to provide 24 hours services and reduce NRW levels, The city government of Sukabumi is planning to revitalize the Non-Revenue Water in Sukabumi City using Public Private Partnership (PPP) scheme.

2.2. Project Description

The description of this project is as follows:

Project Name : Non-Revenue Water Revitalization in Sukabumi City

GCA : Director of Perumda Tirta Bumi Wibawa Sukabumi City

Project Scheme : Design - Build - Finance - Operate - Transfer (BOT)

Project Area : 1. Revitalization of NRW Cinumpang System

: 2. NRW Revitalization of the Cigadog System

: 3. Revitalization of NRW Batu Karut

Cooperation Period : Under review

Estimated costs : Under Calculation

Return on Investment : Under review

Service Area : 1. Subdistrict Gunung Puyuh

: 2. Subdistrict Cikole

: 3. Subdistrict Citamiang

: 4. Subdistrict Warudoyong

: 5. Subdistrict Baros

: 6. Subdistrict Lembur Situ

: 7. Subdistrict Cibeureum And the Sukabumi Regency area that is $\,$ passed by

Pipe network of Perumda TBW Sukabumi City

Financing scheme : Tariff

Concession : Under review

2.3. Project Objectives

The purpose and objective of project is to support the program innovative funding, one of which is with PPP, which is carried out to encourage accelerate the achievement of development goals

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintenance - Transfer

The project scope is as follows:

- 1. Design, build, finance, operate, maintain infrastructure;
- 2. Building a transmission line network and handing it over to Perumda TBW Kota Sukabumi after completion;
- 3. Operate and maintain the General Distribution Network; and
- 4. To comply with Government Regulation Number 47 of 2012 concerning Corporate Social Responsibility (CSR).

4. Technical Specification

4.1. The technical specifications of the Cinumpang System are as

No	Facilities	Capacity
1	Area	Gunung Puyuh Subdistrict, Cikole Subdistrict,
		Lembursitu Subdistrict, Warudoyong Subdistrict
2	Capacity	250 lps
3	Water Produced	250 lps
4	Sold Water	125 lps

4.2. The technical specifications of the Cigadog System are as follows:

No	Facilities	Capacity
1	Area	Cikole Subdistrict, Gunung Puyuh Subdistrict
2	Capacity	50 lps
3	Water Produced	50 lps
4	Sold Water	25 lps

4.3. The technical specifications for the Karut Stone System are as follows:

No	Facilities	Capacity
1	Area	Cibeureum Subdistrict, Citamiang Subdistrict, Baros
		Subdistrict, Cikole Subdistrict
2	Capacity	150 lps
3	Water Produced	150 lps
4	Sold Water	60 lps

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The documents will be prepared by the Special Purpose Company.

6. Land Acquisition and Resettlement Action Plan

The land will be procured by the GCA and the detailed plan will be provided the OBC/FBC report (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	Under Calculation
Indicative Debt to Equity Ratio	
- Debt Level	Under Calculation
- Equity Level	Under Calculation
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

The Preliminary Study of the project indicates the need for government supports which will be further analyzed in the OBC/FBC stage

9. Contact Information

Name : Ila Rahayu, ST

Position : Kepala Bagian Teknik Perumda TBW Kota Sukabumi

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Email : rahayuila76@gmail.com



UNDER PREPARATION

WASTE MANAGEMENT

- 1. Piyungan Waste Treatment
- 2. Manggar Waste Management
- 3. Development of Waste to Energy Facility in South Tangerang
- 4. Integrated Hazardous and Specific Waste Management Facility in Sumatera

Piyungan Waste Treatment

Location: Special Region of Yogyakarta



Government Contracting Agency:

Governor of Special Region of Yogyakarta

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Waste Management System

Description:

Due to the increase in waste volume entering Piyungan Landfill, the capacity of the landfill has been exceeded. It is essential to implement appropriate waste management technology and professional operation management to address this issue effectively. Piyungan Landfill currently receives approximately 600 tonnes of waste per day from Yogyakarta City, Sleman Regency, and Bantul Regency. With the implementation of suitable waste management practices, including efficient waste segregation, recycling, and disposal techniques, the landfill's operations can be improved to handle the increasing waste volume in a sustainable manner.

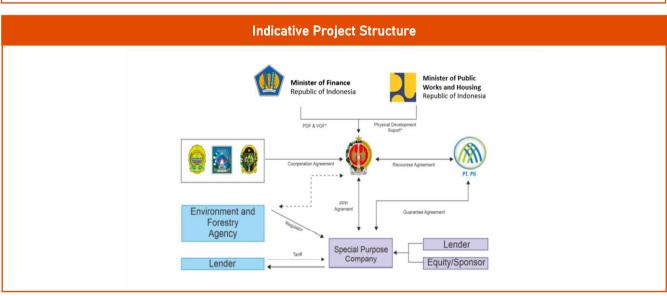
Estimated Project Cost: USD 30.00-40.00 Million

Financial Feasibility:

IRR : Under Calcuation NPV : Under Calculation

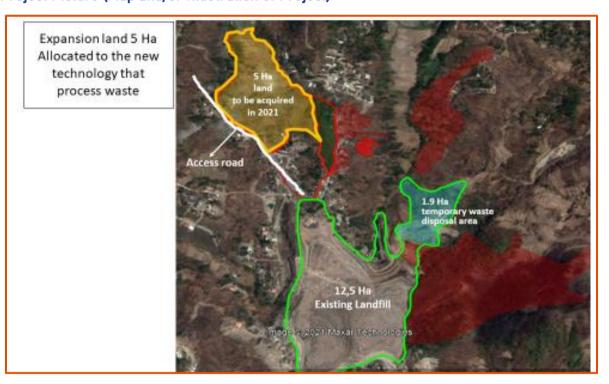
Estimated Concession Period: 20 years





Project Title	Piyungan Waste Treatment
Government Contracting Agency	Governor of Special Region of Yogyakarta
Implementing Agency	Department of Environment and Forestry, Special Region of Yogyakarta
Preparation Agency	MONDP & World Bank Facilitates OBC, and Indonesia Infrastructure Guarantee Fund (PDF assignment by the Ministry of Finance) for FBC and transaction
Project Cost	USD 30.00-40.00 Million
Estimated Concession Period	20 years
Location	Special Region of Yogyakarta

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Map Location of Piyungan Landfill

2. The Opportunity

2.1. Project Background

- The capacity of waste landfill (TPA) has been exceeded while there is an increase in thevolume of waste that enters Piyungan Landfill, therefore appropriate technology and professional operation management are necessary.
- Insufficient land capacity in Piyungan Landfill to treat domestic waste and the absence of waste treatment to reduce the amount of domestic waste.
- Inadequate infrastructure in Piyungan Landfill that could has a negative impact to environment.

2.2. Project Description

- Piyungan Landfill receives around 650 700 tonnes per day of waste from Yogyakarta City, and Sleman Regency and Bantul Regency.
- The area of existing Piyungan Landfill is 12.5 ha, which 10 ha used for landfill area that consist of 2 cells and another 2.5 ha used for supporting facilities (offices, workshops, leachate treatment plant, weighbridges, and

buffer zone).

- The landfill area that can be filled with waste is ± 72.620.83 m2 (in 2017). However, this landfill area is estimated
 to be full in 2022. At this time the landfill area gradually start closing down.
- There was an expansion of new land of approximately 1,9 ha. This expansion land is planned to be used for temporary waste disposal area before the new waste processing technology operates.
- In 2021-2022, the Local Government will add new land approximately 5 ha which is planned for the new waste treatment technology.

2.3. Project Objectives

This project aims to manage municipal solid waste to create a sustainable and environmentally friendly solution with a ciprincipleonomy principle.

3. Business Entity's Scope of Work

The potential scope of partnership that can be carried out by investors, but not limited to the following, are:

- 1. New waste treatment technology using Mechanical Biological Treatment Anaerobic Digestion and Thermal
- 2. Maintain and operate the residual landfill
- 3. Supporting facilities to support the operational of the waste management facility
- 4. Landscape arrangement from its area & maintenance

4. Technical Specification

This project aims to manage domestic waste based on the following regulations:

- 1. Compliance with Indonesian regulation
- 2. The proposed technology should be able to achieve more than 90% of landfill diversion
- 3. Produced a circular economy by product such as recyclates, compost, biogas
- 4. Able to meet international or Indonesian environmental standard (whichever higher)

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Environmental Impact Assessment (AMDAL) of TPA Piyungan will be conducted between Q4 2022 - Q1 2023 parallel with the preparation of FBC and LARAP document.

6. Land Acquisition and Resettlement Action Plan

There was an expansion of new land approximately 5,8 ha. Land and acquisition process is still on progress.

7. Project Cost Structure

Estimated Project Cost	USD 30.00-40.00 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

Government support are in the form of:

- Land provision, DIY Government provides land for construction of the project in Sitimulyo village, Piyungan.
- Permittance, the government is committed to providing necessary permits for the investors to implement this project.
- Government Guarantee from Indonesia Infrastructure Guarantee Fund (IIGF).

A government guarantee may be required to mitigate the project's risks from changes in demand risk and shifts in political scenario. In this regard, the level of risk perceived from investors will be determined at market sounding.

9. Contact Information

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Manggar Waste Management

Location: Balikpapan, East Kalimantan Province

Sector: Waste Management



Government Contracting Agency:

Mayor of Balikpapan City

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Waste to Energy

Description:

The waste management facility, Manggar Landfill, located in Balikpapan City, East Kalimantan, handles a daily waste volume of 415 tonnes. The project encompasses the design, construction, financing, operation, and maintenance of waste processing using sustainable technology. It involves the processing and disposal of waste, as well as generating additional income through the sale of by-products derived from the waste treatment process.

Estimated Project Cost: USD 33.24 Million

Financial Feasibility:

IRR : 15%

NPV : USD 3.51 Million

Estimated Concession Period: 2 years construction and 13 years operation.

Indicative Project Schedule



Project Status: Final Business Case

Regress Agreement PDF Facility and Viability Gap Fund (VGF) PPP Agreement Tipping Fee Payment Agreement Facility Agreement Facility Facility Agreement Facility Forester Agreement Facility Facility Agreement Facility Forester Facility Forester Facility Facility Forester Facility Facility Forester Facility Facility Facility Facility Facility Facility Facility Facility Fa

Project Title	Manggar Waste Management
Government Contracting Agency	The Mayor of Balikpapan City
Implementing Agency	Environment Office of Balikpapan
Preparation Agency	Environment Office of Balikpapan
Project Cost	USD 33.24 Million
Estimated Concession Period	2 years construction and 13 years operation
Location	Balikpapan, East Kalimantan Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Balikpapan Waste Management

2. The Opportunity

2.1. Project Background

Population growth and continuous industrialization in Balikpapan will increase the amount of waste generated. In 2020, Municipal Solid Waste (MSW) in Balikpapan was 470 tonnes/day, most are delivered to TPAS Manggar. Balikpapan City needs a stable and efficient solid waste management plan to make sure utilization of TPAS Manggar longer. This is the reason of this project.

2.2. Project Description

The description of this project is as follows:

Project Name : Manggar Waste Management

Project Location : East Balikpapan District, Balikpapan City

Project Method : Design - Build - Finance - Operate - and Maintain

Project Area : 49 hectares

Estimated Cost : 492 billion IDR

Financing scheme : Public Private Partnership
Government Contracting Agency : Mayor of Balikpapan City

Concession : 15 years (2 years construction and 13 years operation)

Waste volume / capacity : 400 - 450 tonnes/day in 2022

2.3. Project Objectives

The objectives of PPP TPA Sampah Manggar is to operate a solid waste treatment facility with the Design - Build - Finance - Operate - and Maintain scheme. This project will build a solid waste treatment facility for Balikpapan City and will contribute to environmentally friendly solid waste management which economically efficient.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - and Maintain

Project scope is as follows:

- To design, build, finance, operate and maintain new facilities and technologies related to solid waste management to extend life usage of TPAS Manggar;
- To operate and maintain the existing landfill in TPAS Manggar; and
- To comply with Government Regulation related to solid waste management.

4. Technical Specification

The technical specifications for Manggar Waste Management are as follows:

No	Facilities	Capacity
1	Area	49 hectares
2	Sanitary Landfill	Zona 1: 2,6 hectares
		Zona 2: 3 hectares
		Zona 3: 0,6 hectares
		Zona 4: 1,5 hectares
		Zona 5: 2,56 hectares
		Zona 6: 3,25 hectares
		Zona 7: 3,25 hectares
3	Electricity generated	2.000 VA/watt

5. Environmental Impact Assessment (EIA/AMDAL) Findings

TPAS Manggar already has AMDAL in 2014, there are many additional land use and operational activities that need to be added at Addendum AMDAL. The documents will be prepared in 2023.

6. Land Acquisition and Resettlement Action Plan

The total area of Manggar landfill is 49.99 hectares after acquiring land for 4 phases and has been set up to 7 zones for landfilling.

7. Project Cost Structure

Estimated Project Cost	USD 33.24 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	15%
NPV	USD 3.51 Million

8. Government Support and Guarantee

Outline Business Case study indicates the government support options for this project, Viability Gap Fund (VGF) will be sponsored by The Minister of Finance and tax incentives by local government.

9. Contact Information

Name : Drs. Sudirman Djayaleksana, M.M

Position : Head of Environment Agency of Balikpapan City

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Development of Waste to Energy Facility in South Tangerang

Location: South Tangerang, Banten Province



Government Contracting Agency:

Mayor of South Tangerang City

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Waste to Energy

Description:

The waste management project - Cipeucang Landfill in South Tangerang, Banten, handles approximately 800 tonnes of waste per day. The project includes the construction and operation of a Waste-to-Energy (WTE) plant, which will convert the waste into electricity. The specific electricity output and the Purchased Agreement with PLN (Perusahaan Listrik Negara) will be determined during the finalization of the Final Business Case. The project's scope encompasses the design, construction, financing, operation, and maintenance of the WTE plant and its supporting infrastructure. By implementing this project, it aims to address waste management challenges, generate electricity from waste, and contribute to sustainable and efficient waste management practices in the region..

Estimated Project Cost: USD 120.8 Million

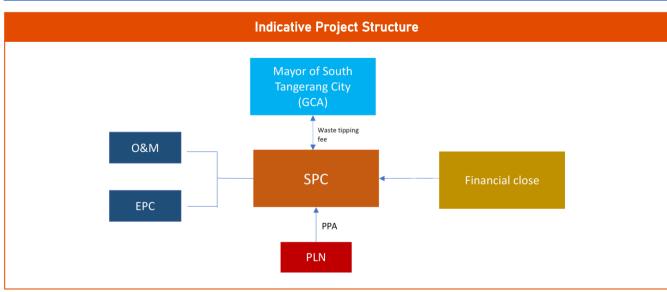
Financial Feasibility:

IRR : 10%

NPV : USD 35.72 Million

Estimated Concession Period: 20 years.





Project Title	Construction of Waste to Energy Facility in South Tangerang
Government Contracting Agency	Mayor of South Tangerang City
Implementing Agency	Environment Agency of South Tangerang
Preparation Agency	Environment Agency of South Tangerang (MoF's PDF)
Project Cost	USD 120.8 Million
Estimated Concession Period	20 years
Location	South Tangerang, Banten Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of South Tangerang Waste to Energy

2. The Opportunity

2.1. Project Background

Population growth and continuous industrialization in South Tangerang will increase the amount of waste generated. The capacity of Municipal Solid Waste (MSW) in South Tangerang is estimated around 970 tonnes/day, with the infrastructure condition is inadequate and has a negative impact of environment. South Tangerang City needs a stable and efficient waste management plan to use solid waste to produce renewable energy. This is the reason South Tangerang City has planned to build and operate Waste to Energy facilities.

2.2. Project Description

The description of this project based on OBC result is as follows:

Project Name : Waste to Energy

Project Location : South Tangerang, Banten

Project Method : Design - Build - Finance - Operate - Maintenance -

Transfer (DBFOMT)

Project Area : 4 hectares Estimated Cost : 120.8 Million USD

Financing scheme : Public Private Partnership
Government Contracting Agency : Mayor of South Tangerang City

Concession : 20 years
Waste volume / capacity : 800 tonnes/day

2.3. Project Objectives

The objective of South Tangerang Waste to Energy is to operate a solid waste treatment facility. This project will build a solid waste treatment facility for South Tangerang and will contribute to the environmentally friendly solid waste management and economically efficient.

3. Business Entity's Scope of Work

Design - Operate - Transfer

Project scope is as follows:

- 1. To design, build, finance, operate and maintain WtE plant and its supporting infrastructures at Cipeucang landfill. In the end of concession period, the facility must be handed over to the GCA;
- 2. To build a transmission line and hand it over to PT. PLN upon completion; and
- 3. To handle the residue produced by the WtE plant.

4. Technical Specification

The technical specifications for South Tangerang Waste to Energy are as follows:

No	Facilities	Capacity
1	Area	4 hectares
2	Incineration capacity	800 tonnes/day
3	Electricity generated	11.7 MW
4	Electricity sold	10.0 MW

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The documents will be prepared by the GCA and finalized by Special Purpose Company.

6. Land Acquisition and Resettlement Action Plan

According to the OBC document, it requires the provision of additional land for supporting facilities. The South Tangerang City Government has already allocated the budget needed for that purpose. Further mapping of the existing land status and the land area that need to be expanded is being assessed in the final business case.

7. Project Cost Structure

Estimated Project Cost	USD 120.8 Million
Indicative Debt to Equity Ratio	
- Debt Level	75%
- Equity Level	25%
IRR	10%
NPV	USD 35.72 Million

8. Government Support and Guarantee

Government guarantee will be provided for this project. Government will support by giving Feed-in Tariff and Tipping Fee.

9. Contact Information

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Position : Head of Waste Management, Environment Agency of South Tangerang Municipality

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Integrated Hazardous and Specific Waste Management Facility in Sumatera

Location: North Sumatera Province

Sector: Waste Management



Government Contracting Agency:

Minister of Environment and Forestry

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Hazardous Waste Management

Description:

This project aims to develop the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area with PPP scheme. The project scheme implemented will be build-operate-transfer. The proposed location for this project will be at Simalungun Regency, North Sumatera (indicative option).

Estimated Project Cost: USD 66.98 Million

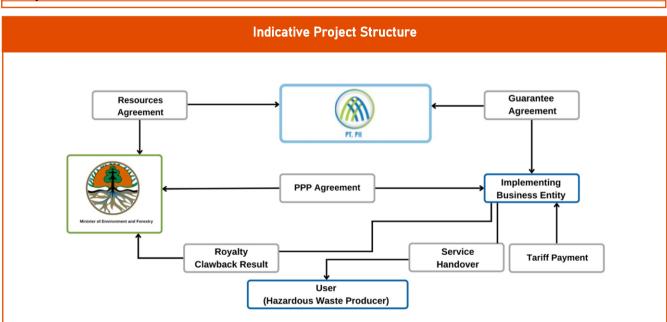
Financial Feasibility:

IRR : 15.57%

NPV: USD 31.90 Million

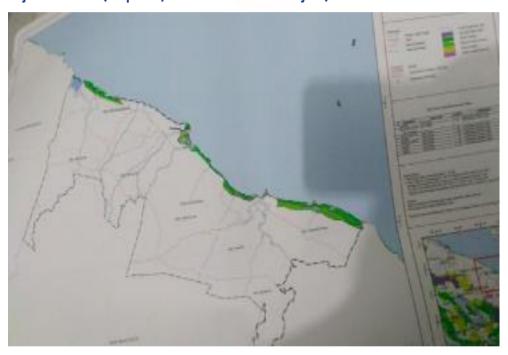
Estimated Concession Period: 10 years

Indicative Project Schedule Financial Final Business Pre-Agreement Bid Award Construction Signing Q1 2026 Case Q2 2023 Qualification Close Q4 2025 Q4 2026 Q2 2026 Q4 2024 Project Status: Final Business Case



Project Title	Integrated Hazardous and Specific Waste Management in Sumatera
Government Contracting Agency	Minister of Environment and Forestry
Implementing Agency	Directorate General for Solid Waste, Hazardous
	Waste and Hazardous Substance Management
Preparation Agency	Directorate General for Solid Waste, Hazardous
	Waste and Hazardous Substance Management
	(National Development Planning Agency
	Facilitate the OBC)
Project Cost	USD 66.98 Million
Estimated Concession Period	10 years
Location	Simalungun Regency, North Sumatera

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

The types of industrial waste that often cause environmental problems and are difficult to treat are those that categorize into hazardous and toxic materials (Bahan Berbahaya dan Beracun / "B3"). To process this waste, a high-quality technology is required that will affect on more expensive investment and operational costs. Many industries have not been able to do their waste treatment because of these constraints, and it is feared that some industries dispose their waste carelessly. B3 waste, when it discharged directly into the environment, has the potential to cause adverse impacts and will accumulated in nature so that the levels become increasingly significant.

To achieve B3 waste management that could be done collectively and efficiently, the government needs to develop an infrastructure facility called B3 Waste Management Center. For the first step, B3 waste generated from industry will be separated from other non-B3 waste, and it will sent to the B3 Waste Management Center. In this facility, B3 waste will be sorted into recyclable and non-recyclable materials, so that each material can be processed using the right method. B3 Waste Management Center needs to be built on a location that meets specific technical requirements so that the risk of pollution impacts can be minimized. Considering the substantial risks posed by B3 Waste, the government is trying to manage B3 Waste in a comprehensive, integrated, and sustainable manner. Therefore, the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area is developed.

2.2. Project Description

The development of the Integrated Hazardous and Specific Waste Management Facility in Sumatera Area with PPP scheme aims to manage hazardous and specific waste, including storage, collecting, transporting, processing, utilization, and stockpiling, as elaborated on the Project Technical Specification. The Business Entity will receive a return of investment in the form of user charge, during the 10 years of cooperation period. The project scheme implemented will be build-operate-transfer.

2.3. Project Objectives

This project objectives are as follow:

To prevent and mitigate the environmental pollution/damage caused by the hazardous waste and the restoration of environmental quality that has been polluted, so that it is in accordance with its original function;

- 1. A comprehensive, integrated and sustainable management of hazardous waste;
- 2. Accelerating the procurement of the Hazardous Waste Management and Specific Waste on a large scale

3. Business Entity's Scope of Work

The business entity shall be responsible for the management of hazardous and specific waste, including storage, collecting, transporting, processing, utilization, and stockpiling, as elaborated on the Project Technical Specification during concession period. The project scheme implemented will be Design-Build-Finance-Operation-Maintenance-Transfer.

However, considering the land availability, potential location of users, and existing transportation business, it is necessary to reassert the following in carrying out the finalization of the scope of services:

- 1. Transportation activities are only from the Transfer Station.
- 2. The possibility of carrying out the transportation activities in accordance with the licenses issued by the Regional Government.
- 3. The possibility of land being provided by the Regional Government for the use of Transfer Station in each service area, so the services provided by Business Entity in the Project did not include the provision of the Transfer Station.
- 4. The possibility of the inclusion of a specific waste (e-waste) into one of hazardous waste to be managed.

4. Technical Specification

The technical specifications for this project are as follows:

No	ltem	Specification
1	Storage	The activity of temporarily storing the hazardous waste carried out by the hazardous waste producers
2	Collecting	Collecting hazardous waste from the hazardous waste producers before it is submitted to the hazardous waste users, processors, and/or hoarders
3	Transporting	Transporting hazardous waste from the waste collector or producer to the processing facility
4	Processing	Process to reduce and/or eliminate the hazardous and/or toxic nature of the waste
5	Utilization	Reuse, recycling and/or recovery activities aimed to turn the hazardous waste into a substitute product to a safe material for human health and the environment
6	Stockpiling	Placing the hazardous waste on the landfill facility so it doesn't endanger human health and the environment.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The Project falls under the 'Hazardous Waste management service industry which conducts a combination of 2 (two) or more activities including utilization, processing and/or landfilling of the Hazardous Waste' category, which requires an AMDAL. The AMDAL needed is a Category A AMDAL (if the stockpiling is included).

6. Land Acquisition and Resettlement Action Plan

No land acquisition is needed. The Project will be conducted on a Local Government Property.

7. Project Cost Structure

Estimated Project Cost	USD 66.98 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	15.57%
NPV	USD 31.90 Million

8. Government Support and Guarantee

Government support are in the form of:

- Land provision, central government provides land for construction of the project in Sibaganding village, Girsang Sipangan Bolon, Simalungun, North Sumatera
- Permittance, the government is committed to provide necessary permits for the investors in the implementation of this project.
- Support from central government:
 - Ministry of Public Works and Housing in providing potential access road from main road to the location;
 - > National Electric company (PLN) in providing in connecting electricity supply from the grid to the project
- Support in the policy on building an integrated waste management infrastructure.

To mitigate the project's risks from changes in demand risk and shifts in political scenario, government guarantee may be required. In this regard, the level of risk perceived from investors will be determined at market sounding.

9. Contact Information

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UNDER PREPARATION

TELECOMMUNICATIONS AND INFORMATIOCS

1. Development of Palapa Ring Integration



Development of Palapa Ring Integration

Location: National

Government Contracting Agency:

Minister of Communications and Informatics

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Communication Network

Description:

The Palapa Ring Integration project aims to develop a fiber optic backbone infrastructure to enhance broadband expand frequency coverage telecommunications. This initiative is expected to have a significant impact on economic growth and support the development of existing Palapa Ring utilities. Recognized as a National Strategic Project (PSN), the project encompasses the construction of a fiber optic network along with the necessary equipment, which can be leased or utilized by telecommunications operators and users. By improving connectivity and providing reliable telecommunications services, the Palapa Ring Integration project aims to facilitate technological advancement and foster economic development in the region.

Estimated Project Cost: USD 518.35 Million

Financial Feasibility:

IRR : 11.8%

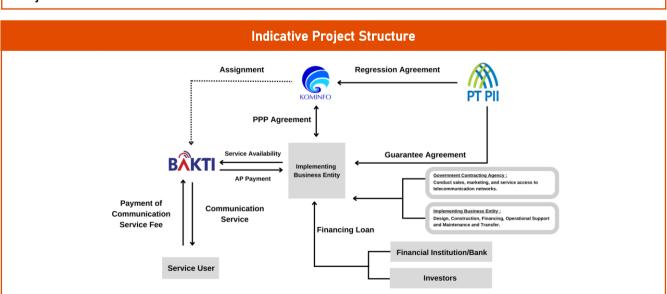
NPV : USD 0 Million (NPV \geq 0 means the project has

financial feasibility)

Estimated Concession Period: 13 months construction

and 15 years operation.





Project Title	Development of Palapa Ring Integration
Government Contracting Agency	Minister of Communications and Informatics
Implementing Agency	BAKTI
Preparation Agency	BAKTI
Project Cost	USD 518.35 Million
Estimated Concession Period	13 months construction and 15 years operation
Location	National

1. Project Picture (Map and/or Illustration of Project)

Palapa Ring Integration is the National backbone project consists of fiber-optics transmission (both terrestrial and sub-marine cables) and radio microwave transmission providing the highspeed broadband network. Connecting the existing Palapa Ring that still separated by region, improving the resiliency and connectivity and provide internet services to the unserved and underserved area.

The below picture shows the Palapa Ring Integration connecting the existing Palapa Ring and improve the resiliency and connectivity of national backbone.



Picture 1 - Layout of Palapa Ring Integration

2. The Opportunity

2.1. Project Background

Indonesia is currently still faced with a digital divide. The Ministry of Communication and Information through BAKTI as an extension of the government has made various efforts to distribute Information and Communication Technology infrastructure and reduce the digital divide. One of the efforts made by BAKTI is the construction of a national broadband backbone network or better known as the Palapa Ring network in 57 districts/cities in Indonesia (the existing Palapa Ring PPP Project). As the internet usage increase in Indonesia especially outside of Java Island then it is required to have an integrated and interconnecting national broadband backbone network. The government's plan to move the capital of Indonesia to Ibu Kota Negara Nusantara (IKN) in Kalimantan also requires a solid reliable, and resilience backbone. Thus, Palapa Ring Integration comes to provide the solution.

2.2. Project Description

The Construction of Palapa Ring Integration with PPP scheme aims to reduce digital divide by constructing a fiber optic backbone and its equipment as elaborated on the Project Technical Specification. The project area is a total of 11,610 km (8,601 submarine, 3,009 inland). The Business Entity will receive a return of investment in the form of

Availability Payment (AP), during the 15 years of cooperation period. The Project scheme implemented will be buildoperate-transfer.

2.3. Project Objectives

The objective of Palapa Ring Integration is to integrate or unify the existing Palapa Ring project of the West Palapa Ring, Central Palapa Ring and East Palapa Ring by creating new backbone networks under PPP scheme. The presence of the Palapa Ring Integration PPP Project will be able to assist national telecommunications operators in maintaining the quality of their services. The Palapa Ring Integration PPP project is also expected to provide resilience of the network as it is required to provide an integrated interconnectivity as a national broadband network.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintain, and Transfer

Project scope is as follows:

- 1. Project transfer is carried out by Implementing Business Entity after the concession period is over;
- 2. At the time of operation and maintenance of the project is the responsibility of the Implementing Business Entity;
- 3. Conducting surveys, designing, engineering, procuring, building, installing, startup, testing, and testing project systems are carried out by Implementing Business Entity;
- 4. Replacing equipment and/or upgrading capacity is also the scope of Implementing Business Entity;
- 5. Land acquisition is carried out by the Implementing Business Entity, although the land acquisition is jointly between the Government Contracting Agency and the Implementing Business Entity, but the implementation will be the responsibility of the Implementing Business Entity;
- Supervision and evaluation as well as project site security assurance are the responsibility of the Government Contracting Agency;
- 7. Network integration and Network Management System with Palapa Ring Existing is a joint part with Government Contracting Agency and Implementing Business Entity, project system testing is the joint responsibility of Government Contracting Agency and Implementing Business Entity;
- 8. Providing telecommunications network access services is carried out by the Government Contracting Agency.

4. Technical Specification

Palapa Ring Integration will deliver telecommunication technology consists of

No	Technology	Details
1		Repeaterless/24 cores
		ITU-T G.654B/C standard
		Follow the National Corridor of SFOC
		Beach Man Hole following environment standard
		2924 km length
2	Fiber Optic Communication System	48 cores
	(FOCS)	ITU-T G.652 standard
		Follow the National/Regional Corridor
		inter POP 80 to 120 km
		8258 km length
3	Microwave Radio Communication System	Radio communication with high tower
		Follow National regulation for frequency spectrum used
		46 hops
4	POP for DWDM and tributary	POP should has power supply
		POP of SFOC could be on landing point or separated in km
		10x10 m2 area required
		Permanent/Semi-permanent building
5	Active Network (L2/L3 Network/Router	Follow technology evolution
	and OTN/DWDM)	n x 100/200Gbps
		Implementing OTN
		L2/L3 IP/MPLS to support VPN
6	Network Management System (NMS)	EMS (Element Management System) / NMS (Network
		Management System) for centralized Operation and
		Implementing Fiber Monitoring System/F-MON
		Implementing Network Inventory & Asset Management System
		NMS/EMS, F-MON, PRI, NIAMS, DCIM placed in Network
		Command Center or Network Operation Center
		· ·

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The GCA as the person in charge of the Palapa Ring Integration Project is responsible for compiling the EIA document.

6. Land Acquisition and Resettlement Action Plan

The land acquisition process will be carried out by Implementing Business Entity which will also bear the acquisition costs. Land acquisition is limited to landing point and Beach Man Hole (BMH) locations as well as road access rights required for landside cables.

7. Project Cost Structure

Estimated Project Cost	USD 518.35 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11.8%
NPV	USD 0 Million

8. Government Support and Guarantee

Policies related to the imposition of telecommunication Usage Rights Fees and Universal Service Obligation (USO) for the Palapa Ring Integration Project are supported by the Ministry of Communication and Information. The support from Ministry of Finance given by the approval of the use of the Availability Payment (AP) scheme in the form of a Preliminary Confirmation Letter and Final Confirmation Letter.

9. Contact Information

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Position: Head of Infrastructure Backbone Division

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UNDER PREPARATION

OIL, GAS, RENEWABLE ENERGY

- 1. Natural Gas Distribution Network for Batam City Households
- 2. Natural Gas Distribution Network for Palembang City Households



Natural Gas Distribution Network for Batam City Households

Location: Batam, Riau Island Province

Sector: Oil, Gas and Renewable Energy



Government Contracting Agency:

Minister of Energy and Mineral Resources

Type of PPP:

Solicited

Return of Investment:

Under Review

Sub-Sector: Natural Gas

Description:

Construction and operation network distribution of household gases from the tie-in to stove connection for 307,749 home connections in Batam City. There are 2 (two) business activities related to piped gas, as a transporter and as a gas distributor through pipelines.

Estimated Project Cost: USD 160.14 Million

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

Estimated Concession Period: 30 years

Indicative Project Schedule



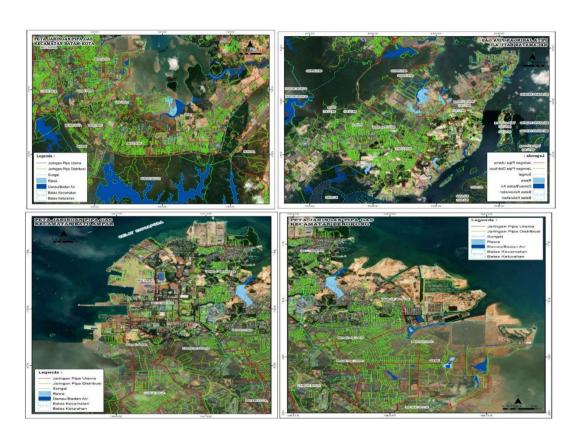
Project Status: Outline Business Case

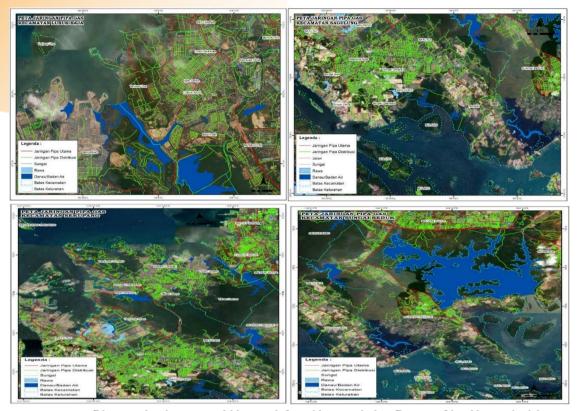
Indicative Project Structure

Will be determined in OBC/FBC

Project Title	Construction of Natural Gas Distribution Network for Batam City Households
Government Contracting Agency	Minister of Energy and Mineral Resources
Implementing Agency	Directorate General of Oil and Gas
Preparation Agency	Indonesia Infrastructure Guarantee Fund (PDF Facility assignment by the Ministry of Finance)
Project Cost	USD 160.14 Million
Estimated Concession Period	30 years
Location	Batam, Riau Province

1. Project Picture (Map and/or Illustration of Project)





Picture 1 - Layout of Natural Gas Network for Batam City Household

2. The Opportunity

2.1. Project Background

To support the government program in reducing the LPG imports, the provision of natural gas. To support the government program in reducing LPG imports, the construction of a natural gas distribution network for households in Batam City will be continued. The choice of Batam City is because it is located near the gas distribution network, the availability of natural gas sources, population density, and the support from the local government, as well as the great potential to develop a commercial gas network. For that reason, Batam City was selected as one of the regions where the gas distribution network to be carried out through PPP.

Batam City has 410,000 households with an area of 3,848.97 km². In 2016, a total of 4.100 households has been connected with the gas distribution network through State Budget (APBN). Furthermore, a State-Owned Enterprise, PT PGN (Persero), has built for 795 household connections through its program called Program Sayang Ibu. The GCA plans to build the gas distribution network for 307,749 household connections under PPP scheme.

2.2. Project Description

Construction and operation of the gas distribution network from the tie-in to household stove connection for 307,749 household connections in Batam City.

2.3. Project Objectives

The objectives of the Natural Gas Network for Batam City Household are as follows:

- Meeting the target of the National Mid-Term Development Plan (RPJMN) 2020-2024;
- Increasing the access to household fuel services, especially the gas pipeline to the public;
- Improving the government's performance in delivering the household fuel services;

- Supporting the energy diversification program in reducing the consumption of subsidized LPG;
- Supporting the government's program in providing the cleaner and more secure energy.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT) scheme. The business entity is responsible for:

- building assets;
- · operating within a certain period;
- · providing services at an agreed level to the community;
- transferring ownership to the government after the cooperation period ends;
- securing minimum income guarantees and / or additional income if service performance exceeds the agreement.

4. Technical Specification

Project technical specification will be further studied during finalization on FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC.

6. Land Acquisition and Resettlement Action Plan

The land will be procured by the GCA and the detailed plan will be provided the OBC/FBC stage (before the procurement of business entity)..

7. Project Cost Structure

Estimated Project Cost	USD 160.14 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

The Preliminary Study of the project indicates the need for government supports which will be further analyzed in the OBC/FBC stage.

9. Contact Information

Name : Retna Aribawani

Position: Sub Coordinator of Oil and Gas Infrastructure Development Planning, Directorate of Oil and Gas

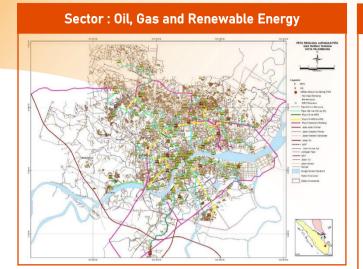
Infrastructure Planning and Development

Phone : 081310700953

Email: retna.aribawani@esdm.go.id

Natural Gas Distribution Network for Palembang City Households

Location: Palembang, South Sumatera Province



Government Contracting Agency:

Minister of Energy and Mineral Resources

Type of PPP:

Solicited

Return of Investment:

Under Review

Sub-Sector: Natural Gas

Description:

Construction and operation network distribution of household gases from the tie-in to stove connection for 354,441 home connections in Palembang City. There are 2 (two) business activities related to piped gas, as a transporter and as a gas distributor through pipelines.

Estimated Project Cost: USD 216.22 Million

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

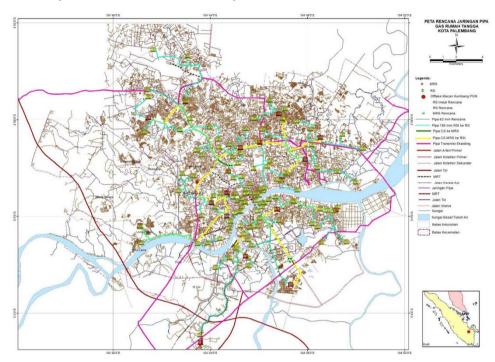
Estimated Concession Period: 30 years

Indicative Project Structure

Will be determined in OBC/FBC

Project Title	Construction of Natural Gas Distribution Network for Palembang City Households
Government Contracting Agency	Minister of Energy and Mineral Resources
Implementing Agency	Directorate General of Oil and Gas
Preparation Agency	Indonesia Infrastructure Guarantee Fund (PDF Facility assignment by the Ministry of Finance)
Project Cost	USD 216.22 Million
Estimated Concession Period	30 years
Location	Palembang, South Sumatera Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Layout of Natural Gas Network for Palembang City Household

2. The Opportunity

2.1. Project Background

To support the government program in reducing the LPG imports, the provision of natural gas distribution network for households in Palembang City needs to be carried out. The city location is near the existing gas transmission and distribution network, availability of natural gas allocation, population density, regional government support, as well as great potential to develop a gas distribution network for commercial and industrial sectors. For that reason, Palembang City was selected as one of the regions where the gas distribution network is to be carried out through PPP.

Palembang City has 388,330 households with an area of 400.61 km². In 2009, a total of 3,311 households has been connected with the gas distribution network. The number was added with 4,315 household connections in 2018, 6,034 household connections in 2019, and 10,161 household connections in 2020. All of which was built through State Budget (APBN).

On the other hand, a State-Owned Enterprise, PT PGN (Persero), has built the gas distribution network for 6,106 household connections through its program called Program Sayang Ibu. In addition, a Regional-Owned Enterprise, PT Sarana Pembangunan Palembang Jaya, has built for 4,569 household connections. The GCA plans to build for 354,441 household connections under PPP scheme. That is 100% if the potential household connections.

2.2. Project Description

Construction and operation of the gas distribution network from the tie-in to household stove connection for 354,441 household connections in Palembang City.

2.3. Project Objectives

The objectives of Natural Gas Network for Palembang City Household are as follows:

- Meeting the target of the National Mid-Term Development Plan (RPJMN) 2020-2024;
- Increasing the access to household fuel services, especially the gas pipeline to the public;
- Improving the government's performance in delivering the household fuel services;
- Supporting the energy diversification program in reducing the consumption of subsidized LPG;
- Supporting the government's program in providing the cleaner and more secure energy.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Operate - Maintenance - Transfer (DBFOMT) scheme. The business entity is responsible for:

- · building assets;
- · operating within a certain period;
- providing services at an agreed level to the community;
- transferring ownership to the government after the cooperation period ends;
- securing minimum income guarantees and / or additional income if service performance exceeds the agreement.

4. Technical Specification

Project technical specification will be further studied during the finalization of the FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC.

6. Land Acquisition and Resettlement Action Plan

The land will be procured by the GCA and the detailed plan will be provided the OBC/FBC stage (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	USD 216.22 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

The Preliminary Study of the project indicates the need for government supports which will be further analyzed in the OBC/FBC stage.

9. Contact Information

Name : Retna Aribawani

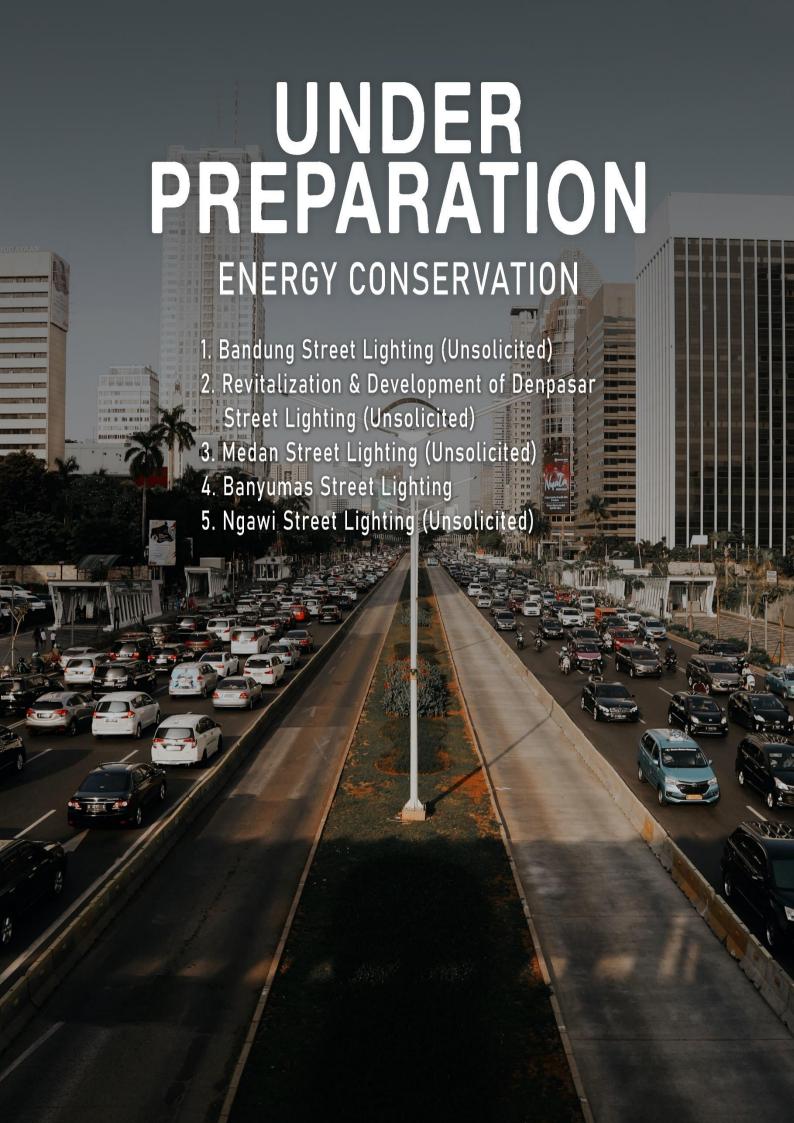
Position: Sub Coordinator of Oil and Gas Infrastructure Development Planning, Directorate of Oil and Gas

Infrastructure Planning and Development

Phone : 081310700953

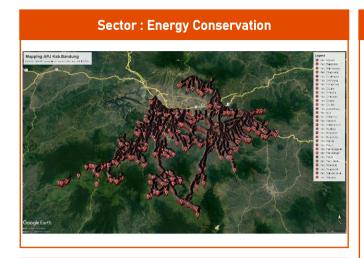
Email: retna.aribawani@esdm.go.id





Bandung Street Lighting

Location: Bandung Regency, West Java Province



Government Contracting Agency:

Regent of Bandung

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Street Lighting

Description:

In order to improve infrastructure services, Bandung District Government will build and repair public street lighting. From the existing 13,432 units of street lighting, it will be added to 28,250 units of lamps using LED technology. This project is planned using the PPP scheme.

Estimated Project Cost: USD 16.01 Million

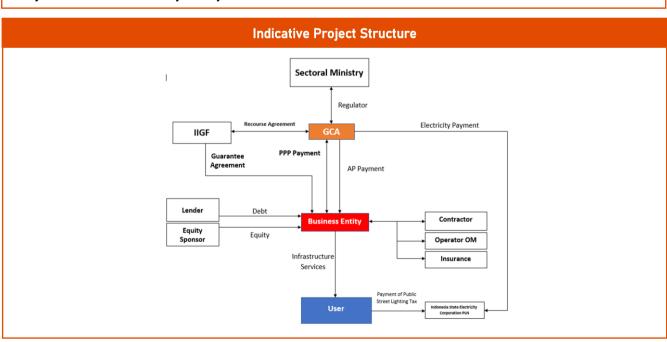
Financial Feasibility:

IRR : 9.41%

NPV : USD 218,108.10

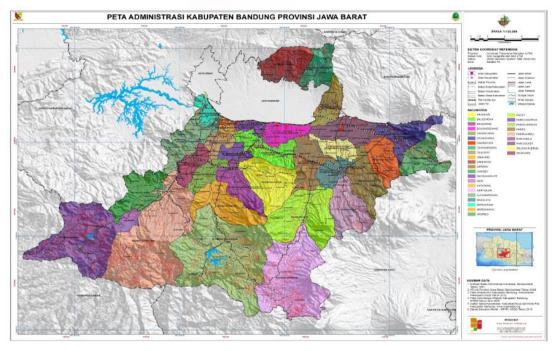
Estimated Concession Period: 10 years

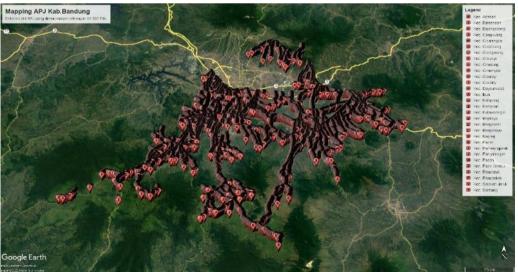




Project Title	Bandung Street Lighting
Government Contracting Agency	Regent of Bandung
Implementing Agency	Department of Public Works, Bandung Regency
	Government
Preparation Agency	PT Surya Energi Indotama
Project Cost	USD 16.01 Million
Estimated Concession Period	10 years
Location	Bandung Regency, West Java Province

1. Project Picture (Map and/or Illustration of Project)





Picture 1 – Layout of Bandung Street Lighting

2. The Opportunity

2.1. Project Background

The existing condition of Public Street Lighting in Bandung Regency is that there are 13,432 units of street lighting which is only 13% of the total units of street lighting use LED technology. To improve the service of Public Street Lighting, the Bandung Regency Government plans to carry out the construction of street lighting on city roads that have not received adequate street lighting services replace the conventional lamps with LED technology.

2.2. Project Description

The description of this project is as follows:

Project Name : Bandung Street Lighting
Project Location : Bandung Regency, West Java Province

Project Method : Design, Build, Finance, Operate, Maintain, Transfer

Project Area : 31 districts in Bandung Regency

Estimated Cost : USD 16.42 Million
Financing scheme : Public Private Partnership
Government Contracting Agency : Regent of Bandung
Concession : 10 years

2.3. Project Objectives

The purpose of the development of Bandung Street Lighting is:

- 4. To provide security, comfort for road users and community social activities;
- 5. To encourage the progress of infrastructure facilities;
- 6. To provide street lighting that use energy-saving lamps;
- 7. To increase Bandung Regency Original Revenue.

3. Business Entity's Scope of Work

DBFOMT (Design - Build - Finance - Operate - Maintain - Transfer)

Project scope is as follows:

- To design, build, finance, operate, maintenance the Public Street Lighting units and transfer assets at the end of the agreement period;
- 2. To provide meterization of the entire Public Street Lighting network;
- ${\it 3.} \quad {\it To provide Public Street Lighting services with LED technology;}\\$
- 4. Electrical installation of street lighting including installation of cable networks and panel boxes;
- 5. Controlling and operating Public Street Lighting;
- 6. To provide street lighting services according to the standard specifications regulated in the Minister of Transportation Regulation 27/2018.

4. Technical Specification

The technical specifications for Bandung Street Lighting are as follows:

No	Facilities	Capacity
1	Leght of Street	1,426 km
2	Armature LED 120 W	1,104 light spot
3	Armature LED 90 W	2,511 light spot
4	Armature LED 70 W	4,378 light spot
5	Armature LED 55 W	7,426 light spot
6	Armature LED 30 W	12,831 light spot

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on study, this project does not require to have AMDAL document.

6. Land Acquisition and Resettlement Action Plan

Based on Study, the construction of Bandung Street Lighting Project does not require land acquisition documents.

7. Project Cost Structure

Estimated Project Cost	USD 16.01 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	9.41%
NPV	USD 218,108.10

8. Government Support and Guarantee

Based on Feasibility Study, this project does not need the government support. However, this project is planned using a government guarantee.

9. Contact Information

Name : Fahrizal Sofyan, ST. MAP

Position : Head of Street Lighting Sub Division in Department of Publick Works and Spatial Planning

Phone : 085101406472

Email : uptdpjukabbandung@gmail.com



Revitalization & Development of Denpasar Street Lighting

Location: Denpasar City, Bali Province

Sector: Energy Conservation



Government Contracting Agency:

Mayor of Denpasar City

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment

Sub-Sector: Street Lighting

Description:

Current condition of street lighting in Denpasar City is still using old technology, which consume a lot of energy and lead to waste in financing. Besides, there are still many areas that have not been illuminated by street lights.

Estimated Project Cost: USD 34.52 Million

Financial Feasibility:

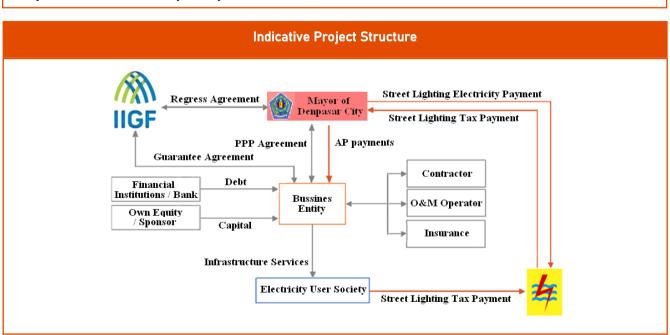
IRR: 10.15%

NPV: USD 5.74 Million

Estimated Concession Period:

11 years including 3 years construction

Pre-Qualification Q3 2023 Project Status: Feasibility Study Indicative Project Schedule Agreement Signing Q1 2024 Q1 2024 Agreement Signing Q1 2024 Q3 2024 Construction Q4 2024 Q4 2024



Project Title	Revitalization & Development of Denpasar Street Lighting
Government Contracting Agency	Mayor of Denpasar City
Implementing Agency	Denpasar City Regional Development Agency (BAPPEDA)
Preparation Agency	PT Wahana Multitron
Project Cost	USD 34.52 Million
Estimated Concession Period	11 years including 3 years construction
Location	Denpasar City, Bali Province

1. Project Picture (Map and/or Illustration of Project)



Propose Design Point Distribution of Lights in Denpasar City

2. The Opportunity

2.1. Project Background

Based on survey result, there are 18,273 lights installed in Denpasar City. With the details of 16,839 conventional lamps and 1,434 LED lamps. In general, 95,15% of light installed in Denpasar City are conventional type that has been installed for ages, consumes high amount of energy and illumination is not in accordance.

By replacing all lamps into LED lamps can result in energy / cost savings up to greater than 50%, currently electricity payments for street lights are USD 1,14 Million per year. It means the savings that can be done in 11 years are USD 6.2 Million.

So, it is considered necessary to replace the street lighting with LED technology to save energy.

The description of this project is as follows:

Project Name : Revitalization and Development of Denpasar Street

Lighting

Project Location : Denpasar City, Bali Province

Project Method : DBFOMT (Design Build Finance Operate Maintenance

Transfer)

Project Area : Denpasar City
Estimated Cost : USD 34,52 Million

Financing scheme : Public Private Partnership Government Contracting Agency : Mayor of Denpasar City

Concession : 11 Year including 3 Years Construction

2.2. Project Objectives

Revitalization and development of the street lighting will provide optimal illumination. This project is carried out by rearranging street lights with a design that refers to regulations and knowledge comprehensively using the structure of DBFMOT (Design Build Finance Maintenance Operate Transfer) scheme by using Availability Payment as the return scheme so that the savings will be used to finance areas that have not been served by street lighting. In addition, it can also increase social, economic and tourism activities at night.

3. Business Entity's Scope of Work

- 1. Revitalization and Development
 - a. Light distribution throughout the city of Denpasar by rearranging the street light
 - b. Providing more lights in unserved areas
- 2. Preventive Maintenance
 - a. Report on the electrical power usage of each panel
 - b. Report of deviation in electrical power usage due to external party
 - c. Beam test work periodically
 - d. Street lights & its environmental maintenance work
 - e. Real-time complaint report and progress
 - f. Maintenance historical reports stored in the database
 - g. Digital Database can be accessed on-line
- 3. Corrective Maintenance
 - a. Light placement respond time
 - i. Category Low: equipment fault; maximum 1 x 24 Hours
 - ii. Category Medium: equipment fault caused by third party; maximum 3 x 24 Hours
 - iii. Category Heavy: accident / force majeur; Will be determined specifically
 - b. Illumination optimization / normalization work

4. Technical Specification

The technical specifications for Revitalization and Development of Denpasar Street Lighting are as follows:

No	Facilities	Capacities
1	Street Lamp	21.600 Lamps
2	Pole	14.018 Poles
3	Control Panel	404 Units

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The documents will be prepared by the Special Purpose Company.

6. Land Acquisition and Resettlement Action Plan

Based on Study, the construction of Bandung Street Lighting Project does not require land acquisition documents

7. Project Cost Structure

Estimated Project Cost	USD 34.52 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	10.15%
NPV	USD 5.74 Million

8. Government Support and Guarantee

Government support is in the form of ease of licensing while government guarantees are from IIGF (PT PII)

9. Contact Information

Name : I Putu Wisnu Wijaya Kusuma, ST. MT

Position : Head of the Denpasar City Regional Development Agency

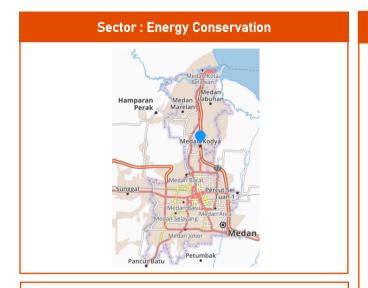
Phone : (0361) 413357

Email : bappeda@denpasarkota.go.id



Medan Street Lighting

Location: Medan City, North Sumatera



Government Contracting Agency:

Mayor of Medan

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Street Lighting

Description:

The Medan City Government plans to build 124,038 public street lighting and install Light Emitting Diode (LED) lamp technology equipped with smart systems. The City Government also build a command center to control and operate the street lighting.

Estimated Project Cost: USD 98.61 Million

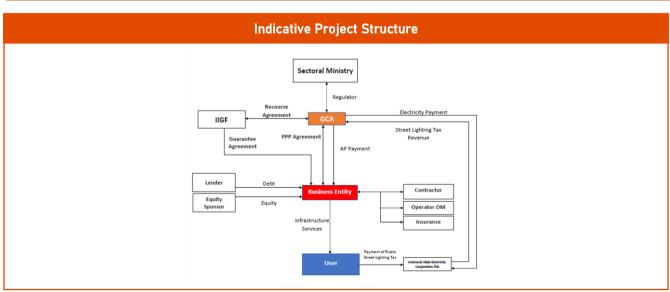
Financial Feasibility:

IRR : 10.69%

NPV: USD 9.43 Million

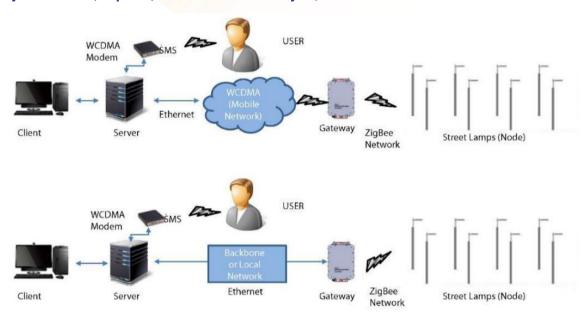
Estimated Concession Period: 13 years





Project Title	Medan Street Lighting
Government Contracting Agency	Mayor of Medan
Implementing Agency	Medan City Government
Preparation Agency	Apex Cakra Buana Consorsium
Project Cost	USD 98.61 Million
Estimated Concession Period	13 years
Location	Medan City, North Sumatera

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Smart System Data Flow Topography

2. The Opportunity

2.1. Project Background

There were 90,835 street lighting lamps consisted of 14,022 units use LED technology and 76,813 non-LED in Medan City in 2021. This indicates that the application of energy saving lamps in Medan City was only 15.44%.

In addition to adding public street lighting units, there are other components that will be built such as CCTV, Speaker, Free-Wifi and Command Center for the Smart Roadway System Monitoring in Medan.

2.2. Project Description

The description of this project is as follows:

Project Name : Medan Street Lighting
Project Location : Medan City, North Sumatera

Project Method : Design, Build, Finance, Operate, Maintenance, Transfer

Project Area : The city roads of Medan City.

Estimated Cost : USD 98.61 Million Financing scheme : Public Private Partnership

Government Contracting Agency : Mayor of Medan Concession : 13 years

2.3. Project Objectives

The purpose of the development of Medan Street Lighting is:

- To provide security, comfort for road users and community social activities;
- To encourage the progress of infrastructure facilities;
- To facilitate the monitoring of Street Lighting facilities;
- To provide street lighting that uses energy-saving lamps;
- To increase Medan City Original Revenue.

3. Business Entity's Scope of Work

DBFOMT (Design - Build - Finance - Operate - Maintenance - Transfer)

Project scope is as follows:

- To design, build, finance, operate, maintenance the Public Street Lighting units and transfer assets at the end
 of the agreement period;
- To provide meterization of the entire Public Street Lighting network;
- To provide Public Street Lighting services with LED technology;
- · Electrical installation of street lighting including installation of cable networks and panel boxes;
- Installing a WAN network for the entire area of Medan City;
- Controlling and operating Public Street Lighting through the Command Center;
- To provide street lighting services according to the standard specifications regulated in the Minister of Transportation Regulation 27/2018 and SNI 7391-2008.

4. Technical Specification

The technical specifications for Medan Street Lighting are as follows:

No	Facilities	Capacity
1	Public Street Lighting	124,038 units with LED and solar panel
		technology. Lamppost specification 5m, 7m,
		9m.
2	Luminaire	124,038 units (130 watt, 100 watt, 80 watt and
		60 watt)
3	CCTV	42 units
4	Speaker	42 units
5	Free-Wifi	42 units (The internet network will be divided
		into 2 bandwidths)
6	Smart System Monitoring	Application and Command Center.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Based on Feasibility Study, the environmental document that is required for Medan Street Lighting Project is Environmental Management Efforts and Environmental Monitoring Efforts (UKL/UPL).

6. Land Acquisition and Resettlement Action Plan

Based on Feasibility Study, construction of Medan Street Lighting Project does not require land acquisition documents which are a requirement for obtaining a location determination.

7. Project Cost Structure

Estimated Project Cost	USD 98.61 Million
Indicative Debt to Equity Ratio	
Debt Level	75%
Equity Level	25%
IRR	10.69%
NPV	USD 9.43 Million

8. Government Support and Guarantee

Based on Feasibility Study, this project does not need the government support. However, this project plans to use a government guarantee.

9. Contact Information

Email

Name : Benny Iskandar

Position : Head of Development Planning Board of Medan City

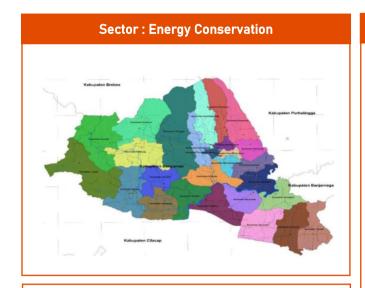
Phone : 0811 6313 311

: bappedamedan@gmail.com



Banyumas Street Lighting

Location: Banyumas Regency, Central Java Province



Government Contracting Agency:

Regent of Banyumas

Type of PPP:

Solicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Street Lighting

Description:

The Banyumas Regency Government are plan to build around 10,000 public street lighting and install Light Emitting Diode (LED) lamp technology on each environmental road section in 331 Villages and in 27 Districts.

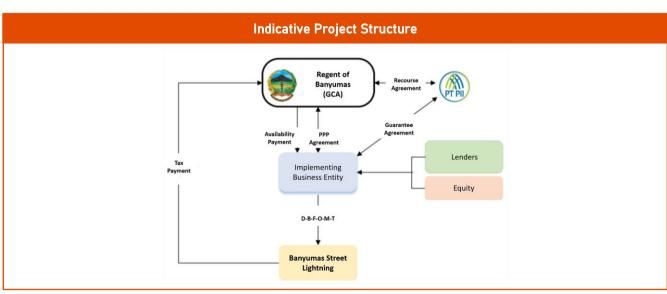
Estimated Project Cost: Under Calculation

Financial Feasibility:

IRR : Under Calculation NPV : Under Calculation

Estimated Concession Period: 10 years





Project Title	Banyumas Street Lighting
Government Contracting Agency	Regent of Banyumas
Implementing Agency	Transportation Office of Banyumas Regency
Preparation Agency	Transportation Office of Banyumas Regency
Project Cost	Under Calculation
Estimated Concession Period	10 years
Location	Banyumas Regency, Central Java Province

1. Project Picture (Map and/or Illustration of Project)



Picture 1 - Banyumas Regency Administrative Boundary

2. The Opportunity

2.1. Project Background

There were \pm 20.944 units street lighting lamps in Banyumas Regency. Additional public street lights are needed to provide optimal service to the community. Due to budget, technology and human resource limitations, innovation and breakthroughs are needed in accelerating public street lighting services by developing a network of street lighting equipment under the Public Private Partnership (PPP) scheme.

2.2. Project Description

The description of this project is as follows:

Project Name : Banyumas Street Lighting

Project Location : Banyumas Regency, Central Java Province

Project Method : D - B - F - O - M - T

Project Area : on local road section in 331 Villages and in 27 Districts

Estimated Cost : Under calculation

Financing scheme : Public Private Partnership
Government Contracting Agency : Regent of Banyumas

Concession : 10 years

2.3. Project Objectives

The purpose of the development of Banyumas Street Lighting is:

- To provide security, comfort for road users and community social activities;
- To facilitate the monitoring of Street Lighting facilities;
- To provide street lighting that uses energy-saving lamps;
- To increase Banyumas Regency Original Revenue.

3. Business Entity's Scope of Work

D - B - F - O - M - T (Design - Build - Finance - Operate - Maintenance - Transfer).

Project scope is as follows:

- To design, build, finance, maintenance the Public Street Lighting units and transfer assets at the end of the agreement period;
- To provide meterization of the entire Public Street Lighting network;
- To provide Public Street Lighting services with LED technology;

4. Technical Specification

Project technical specification will be further studied during the OBC/FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

This project is not included in the project that requires an AMDAL but a SPPL (statement letter to manage the environment).

6. Land Acquisition and Resettlement Action Plan

In implementing the PPP Project, the Banyumas Street Lighting Project does not use regional or state assets. The scope of the project provides street lighting operation services by providing new light points and infrastructure.

7. Project Cost Structure

Estimated Project Cost	Under Calculation
Indicative Debt to Equity Ratio	
- Debt Level	Under Calculation
- Equity Level	Under Calculation
IRR	Under Calculation
NPV	Under Calculation

8. Government Support and Guarantee

The Preliminary Study of the project indicates the need for government supports which will be further analyzed in the OBC/FBC stage.

9. Contact Information

Name : Wahyudiono, S.ST

Position : Head of Infrastructure and Territorial Regional Development Planning Agency,

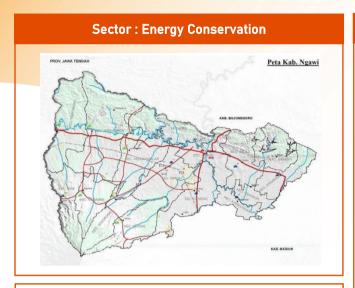
Research and Development (BAPPEDALITBANG) Banyumas Regency

Phone : +62 813-2800-0955

Email: faviamzar01@gmail.com

Ngawi Street Lighting

Location: Ngawi, East Java



Government Contracting Agency:

Regent of Ngawi

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Street Lighting

Description:

The street lighting services in Ngawi Regency is inadequate. Only 18.3% have been served by street lighting out of 604 km of national and regency roads. Through the PPP Scheme, the Ngawi Regency Government planned to add new street lighting points to increase the coverage of services as well as replacing existing lamp types to LED to increase energy efficiency. Based on the initial study, the street lighting project is planned to be implemented with the scope of 5,700 new lamp points and 2,048 replacement points. The increase in public street lighting coverage is expected to increase travel security and safety, which will then have an impact on regional economic growth.

Estimated Project Cost: USD 5.6 Million

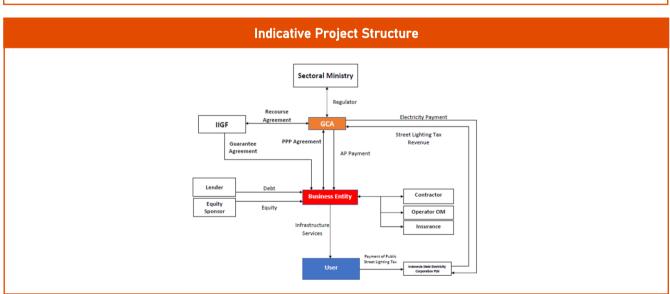
Financial Feasibility:

IRR : 11.06% NPV : USD 352,620

Estimated Concession Period:

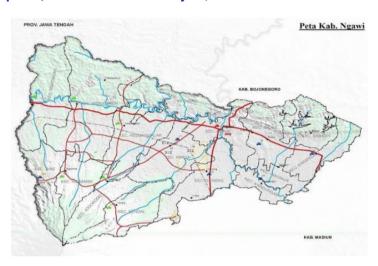
1 year construction and 10 years operation





Project Title	Ngawi Street Lighting
Government Contracting Agency	Regent of Ngawi
Implementing Agency	Ngawi Regency Government
Preparation Agency	Evercoss – Fokus – Perwira
Project Cost	USD 5.6 Million
Estimated Concession Period	1 year construction and 10 years operation
Location	Ngawi Regency, East Java Province

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

In order to improve services, especially in road infrastructure, the regional government plans to build public street lighting on several roads that have not been served by this infrastructure. Public street lighting infrastructure will also be equipped with LED lights to promote energy efficiency.

2.2. Project Description

The description of this project is as follows:

Project Name : Ngawi Street Lighting

Project Location : Ngawi Regency, East Java Province

Project Method : Design, Build, Finance, Operate, Maintain, Transfer

Project Area : Along National roads and District roads

Estimated Cost : USD 5,711 Million for 5,700 new points and 2.048 Lamp

replacement

Financing scheme : Public Private Partnership

Government Contracting Agency : Regent of Ngawi

Concession : 1 year construction and 10 years operation

2.3. Project Objectives

The purpose of the development of Ngawi Street Lighting is to improve services for the society, increasing security, reducing crime at night and increasing community activities at night to improve the surrounding economy.

3. Business Entity's Scope of Work

Design - Build - Finance - Operate - Maintain - Transfer

The business entity is responsible for:

- Build, Operate, Maintain 5,700 new Street Lighting Points
- Replace 2,048 existing street lighting lamp
- Transfer all partnership asset to the government at the end of partnership period

4. Technical Specification

The technical specifications for Ngawi Street Lighting are as follows:

Building new Street Lighting with 9 m height hexagonal pole c/w LED 90 W auto dimming at Regency Roads and retrofitting from sodium lamp with variants wattage between 250 W till 400 W into 120 W LED auto dimming at National Road and into LED 90 W at Regency Roads.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The environmental document needed for this project is Surat Pernyataan Kesanggupan Pengelolaan dan Pemantauan Lingkungan (SPPL) / Statemnt of Ability to Manage and Monitor the Environment. This document is required for the small-scale of environmental and social impacts.

6. Land Acquisition and Resettlement Action Plan

Ngawi Street Lighting project does not require land acquisition and resettlement.

7. Project Cost Structure

Estimated Project Cost	USD 5.6 Million
Indicative Debt to Equity Ratio	
Debt Level	80%
Equity Level	20%
IRR	11.06% (project)
NPV	USD 352,620

8. Government Support and Guarantee

Government guarantee from Indonesia Infrastructure Guarantee Fund (IIGF) / PT Penjaminan Infrastruktur Indonesia (PT PII).

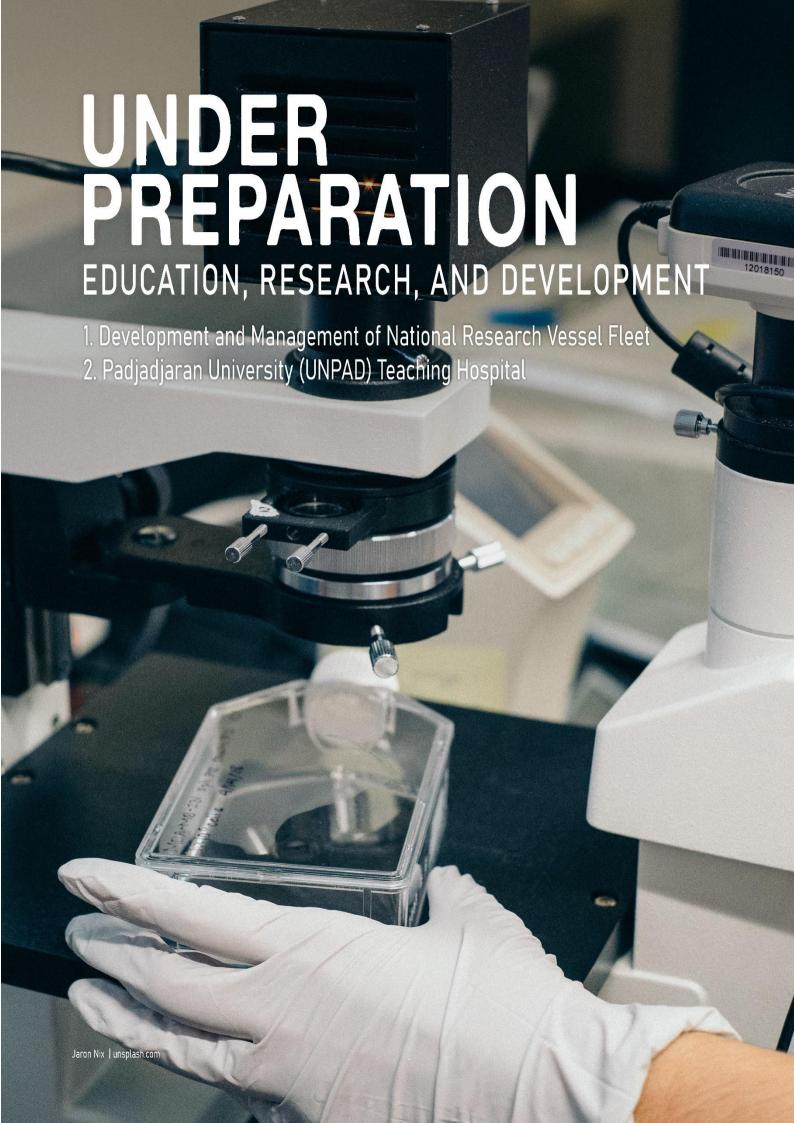
9. Contact Information

Name : Hangga Agung Otto Fandian, S.STP, M.Si

Position : Head Of Infrastructure and Regional Development Planning Agency for Ngawi Regency

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Development and Management of National Research Vessel Fleet

Location: West Java Province

Sector: Education, Research and Development



Government Contracting Agency:

Head of Research and Inovation Agency

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Educational Facilities

Description:

The project will support marine research conducted by the National Research and Innovation Agency (BRIN) and its partners, in the areas of supporting marine research activities, which will focus on four types of marine research, namely: marine geosciences, marine fisheries, oceanography and hydrography.

Estimated Project Cost: USD 257.30 Million

Financial Feasibility:

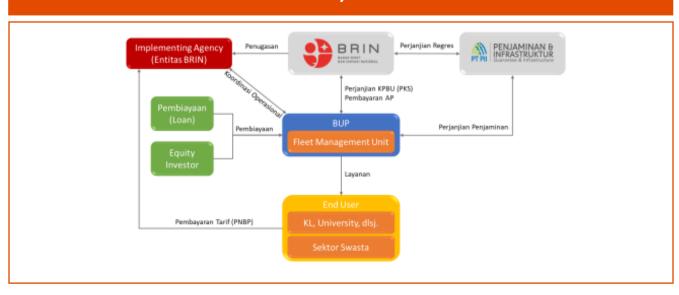
IRR : 14.5%

NPV : USD 5.87 Million

Estimated Concession Period: 20 years



Indicative Project Structure



Project Title	Development and Management of Research Vessel Fleet
Government Contracting Agency	Head of Research and Inovation Agency (BRIN)
Implementing Agency	Deputy for Research and Innovation Infrastructure BRIN
Preparation Agency	Head of Research and Inovation Agency (BRIN)
Project Cost	USD 257.30 Million
Estimated Concession Period	20 years
Location	West Java Province

1. Project Picture (Map and/or Illustration of Project)



ocean cruiser research vessels



coastal research vessels



ocean cruiser research vessel

2. The Opportunity

2.1. Project Background

On September 26, 2017, the National Oceanic Research Consortium (NORC) was formed with the aim of making marine research activities in Indonesia unified and well-coordinated. The research consortium consists of 11 ministerial institutions, non-ministerial government agencies (LPNK), and several universities.

The research consortium is committed to building cooperation related to research programs, infrastructure development and marine data. For efficiency and effectiveness of ocean research institutions and financing, the research consortium activities are carried out synergistically and systematically to produce an integrated ocean research program by all parties by linking the interaction between the ocean and atmosphere with the impacts of climate change. Therefore, the available resources must be well managed and structured. These resources fall into two main categories: i) a national marine data centre to store and exchange data in the marine sector, and ii) newly

built research vessels or modernized existing vessels and research equipment. The research consortium is also committed to formulating a marine research roadmap based on the National Research Master Plan 2045 that includes developing research resources and strengthening research institutions in the marine sector.

To meet these research needs, it is necessary to modernize and add to the existing fleet of ships and marine research facilities. In addition, it is necessary to improve the management of the fleet and research activities in the marine sector. The fulfillment of these needs will be carried out using the Public-Private Partnership (PPP) financing scheme. It is expected that the PPP scheme in managing the fleet of ships and marine research facilities will improve the quality and management of marine research results in Indonesia.

2.2. Project Description

BRIN will develop a Fleet Management Unit (FMU) to manage 4 (four) existing research vessels owned by BRIN currently including Baruna Jaya I and Baruna Jaya III (Ex-BPPT) as well as retrofitted Baruna Jaya VIII (Baruna Jaya VIII+) and Baruna Jaya IX financed through PLN (foreign loan) scheme (ex-LIPI). FMU will serve marine research on marine geoscience, marine-atmosphere relation, fisheries, and hydrography, mainly from the Ocean Research Consortium (KRS), Government Ministries/Agencies, universities, and foreign researchers or research institutions. During the operational period, BUP will provide an additional fleet of 9 research vessels consisting of 5 coastal research vessels, 3 ocean cruiser research vessels and 1 ocean cruiser research vessel.

2.3. Project Objectives

This project aims:

- a. to increase the utilization value of Baruna Jaya I, III, and VIII+ and Baruna Jaya IX vessels to be more optimal;
- b. to improve public services and private/international services in the field of marine research;
- c. to improve the management of research vessels through setting up Fleet Management Unit (FMU);
- to support the utilization of marine research results for the marine geoscience, marine-atmosphere relation, fisheries, and hydrography sectors;
- e. to support the field of marine research or survey in order to have a research vessel or fleet equipped with adequate equipment.

3. Business Entity's Scope of Work

The scope of cooperation between GCA and the Business Entity in the Management and Development of the National Research Ship Fleet PPP project is as follows:

- a. The business entity will procure 5 units of Coastal Type Research Vessel, 3 units of Ocean Explorer Research Vessel, and 1 unit of Ocean Explorer Research Vessel;
- b. The business entity will prepare and run the Fleet Management Unit (FMU);
- c. The business entity will conduct research business development of coastal, marine, and oceanic industries based on research vessels in the aspect of assisting marketing conducted by BRIN

4. Technical Specification

The fleet management unit will operate a research vessel equipped with updated marine research equipment and capable of accommodating portable instruments. The scope of operations is as follows:

- 1. Establishment of Fleet Management Unit (FMU)
- 2. Operation, Maintenance of BJ VIII+ and BJ IX Vessels, including research equipment during the period of cooperation
- 3. Procurement of ship crew
- 4. Searching for market share
- 5. Procurement of new vessels
- 6. Operation and maintenance of new vessels during the cooperation period
- 7. Provision of marine research services
- 8. Provision of base port and yard

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The project does not require AMDAL or UKL-UPL documents to support project activities.

6. Land Acquisition and Resettlement Action Plan

The project does not require a land acquisition or resettlement action plan.

7. Project Cost Structure

Estimated Project Cost	USD 257.30 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	14.5%
NPV	USD 5.87 Million

8. Government Support and Guarantee

The government will support the construction of one ocean research vessel through a foreign loan scheme.

9. Contact Information

Name : Prakoso Bhairawa Putera

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Padjadjaran University (UNPAD) Teaching Hospital

Location: West Java Province

Sector: Education, Research and Development



Government Contracting Agency:

Padjadjaran University

Type of PPP:

Solicited

Return of Investment:

Under Discussion

Sub-Sector: University Hospital

Description:

To improve the quality of health services in West Java Province, Padjadjaran University is planning to build a UNPAD Teaching Hospital on an approximate area of 4.2 hectares. The project will be carried out in two stages with the second phase to build building B consisting of 5 floors and 2 basements will be implemented through PPP scheme.

Estimated Project Cost: USD 25.58 Million

Financial Feasibility:

IRR: 14% (Under Review)

NPV : USD 2.82 Million (Under Review)

Estimated Concession Period: 17 years



Indicative Project Structure

In Structuring Process

Project Title	Universitas Padjadjaran Teaching Hospital
Government Contracting Agency	Minister of Education, Culture, Research, and
	Technology with delegation to Rector of
	Universitas Padjadjaran
Implementing Agency	Padjadjaran University
Preparation Agency	Padjadjaran University
Project Cost	USD 25.58 Million
Estimated Concession Period	17 years 0 months (include 2 years of
	construction)
Location	West Java Province

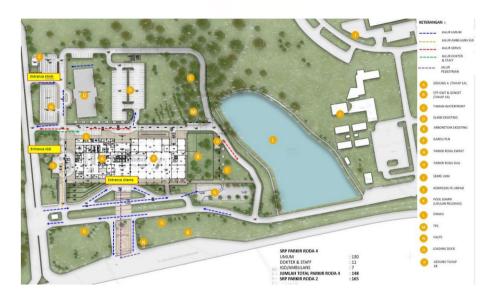
1. Project Picture (Map and/or Illustration of Project)











2. The Opportunity

2.1. Project Background

In West Java Province there are 377 public and private hospitals. The number of hospital bed facilities in 2020 is 45,289 beds. Compared to 2019, the number of hospital beds was 38,005 and so there are an increase of 7,284 beds. WHO standard for the ratio of beds to population is 1/1000. The ratio of hospital beds in West Java Province to population in 2020 is 1/1,103 of the population.

Referring to the WHO standard, West Java ideally requires 49,936 beds. This means that up to now there is still a shortage of around 4,647 beds and when compared to the total population, it is 1 bed for every 40,931 residents of West Java. Padjadjaran University is one of the tertiary institutions in West Java which has a study program in the field of health (medicine, dentistry, pharmacy, nursing, midwifery, and psychology). It is hoped that the hospital that will be built in addition to providing services, also conducts education and research in overcoming problems in health sector, especially in West Java Province and developing national and global recognition as the goal of developing the Unpad Teaching Hospital in partnership with the private sector through the PPP scheme.

2.2. Project Description

The project to build Unpad Teaching Hospital will consist of 2 phases with Building A (phase 1) being funded from West Java Province grant and Padjadjaran University fund. Phase 2 of the project will use the PPP scheme to build Building B consisting 5 floors and 2 basements.

2.3. Project Objectives

The construction of the Unpad Teaching Hospital is necessary in addition to serving the community as well as a vehicle for the development of education, research and innovation in the health sector which is supported by the fields of medicine, dentistry, pharmacy, nursing, and midwifery as well as other fields of science that support program activities. It is hoped that the Unpad Teaching Hospital will be Unpad's effort to gain global recognition and benefit the world community.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Operate (Partially) - Maintenance - Transfer (DBFOMT) scheme. The business entity is responsible for:

- building assets;
- · operating partially within certain scope during the concession period;
- providing services at an agreed level to the community (hospital);
- · transferring ownership to the government after the cooperation period ends;

4. Technical Specification

In early design, Building B will consist of 8 floors and 2 basements:

- 1. Basement BS2 floor
 - a) Parking space
- 2. Basement BS1 floor
 - a) Parking space
- 3. 1st floor
 - a) Lobby
 - b) Patient Waiting Area
 - c) Admission Room
 - d) Outpatient Polyspecialist
 - e) Promkes
 - f) Cafeteria
 - g) ATM Center
 - h) Banks
- 4. 2nd floor
 - a) Specialist Poly (Outpatient)
 - b) Prayer room
 - c) Stunting Center
- 5. 3rd floor
 - a) Anatomical Pathology Laboratory Room
 - b) Clinical Microbiology Laboratory
 - c) Hemodialysis Room
 - d) VIP and VVIP Class Inpatient Rooms

Operating Room

- 6. 4th Floor
 - a) Inpatient Room
 - b) Nurse Station

7. 5th floor

- a) Office Space
- b) Meeting Room
- c) Support Room
- d) Perceptor Room

8. 6th floor

- a) Inpatient Room
- 9. 7th floor
 - a) Inpatient Room
- 10.8th floor
 - a) Inpatient Room

More detailed technical specifications will be further studied in the OBC/FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC.

6. Land Acquisition and Resettlement Action Plan

The land currently identified as state-owned property and the permits will be handled by the GCA with detailed plan will be provided in the OBC/FBC stage (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	USD 25.58 Million
Indicative Debt to Equity Ratio	
- Debt Level	30%/Under Review
- Equity Level	70%/Under Review
IRR	14%/Under Review
NPV	USD 2.82 Million/Under Review

8. Government Support and Guarantee

Government support and guarantee will be identified during OBC/FBC preparation.

9. Contact Information

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UNDER PRATION SPORTS, ARTS, AND CULTURAL FACILITIES

1. Banten Sports Center



Banten Sports Center

Location: Banten Province

Sector: Sports, Arts and Cultural Facilities



Government Contracting Agency:

Banten Provincial Government

Type of PPP:

Solicited

Return of Investment:

Other Form

Sub-Sector: Sports Facilities

Description:

Banten Sports Center Complex to become one of international-standard sports complex in Indonesia within the area of ±68 ha. This project has an objective to build sports center complex in Banten with high-demand sports venue and commercial area

Estimated Project Cost: USD 34.86 Million

Financial Feasibility:

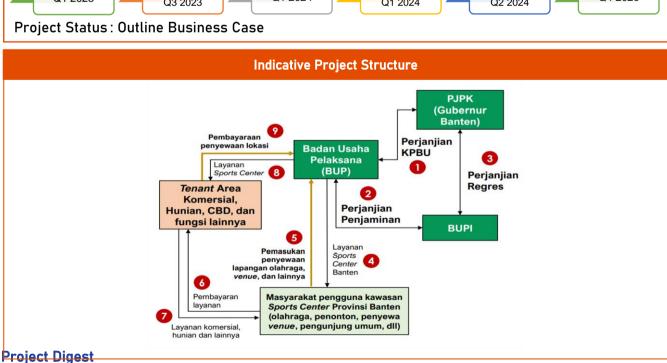
IRR : 10.38%

NPV: USD 3.49 Million

Estimated Concession Period: 25 years

(including 2 years construction)





Project Title	Banten Sports Center
Government Contracting Agency	Banten Provincial Government
Implementing Agency	Banten Provincial Government
Preparation Agency	Banten Provincial Government
Project Cost	USD 34.86 Million
Estimated Concession Period	25 years (incld. 2 years construction)
Location	Banten Province

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

Banten Sports Center is an action by the Banten Provincial Government in order to improve their citizen health, both physically and spiritually. This is even more important considering the rank of Banten Province at the XX Papua 2021 National Sports Week (PON) which is quite low despite the area and the large number of areas within Banten Province. Banten Province is ranked 14th out of a total of 34 provinces participating in the 2021 PON XX Papua. This section describes the rationale for building the Banten Sports Center from a technical and economic perspective.

2.2. Project Description

Making the Banten Province Sports Center area a sports area with international standards on an area of \pm 68 ha. In addition, the sports center area will consist of sports venues and commercial areas.

2.3. Project Objectives

- 1. To build sports center complex in Banten with high-demand sports venue and commercial area
- Strengthening the Banten Province Sport Center Area that supports the role and function of Banten Province as a National Activity Centre;
- 3. Physical strengthening of the Banten Province Sport Center Area as one of the important landmarks of Banten Province;
- 4. Realizing the development of the Banten Province sports center Area as one of the growth centers in the city and district of Serang, Banten in a sustainable and environmentally sound manner, and
- The build and develop the availibility of facilities and infrastructure in the hope that it will facilitate the development of economic, socio-cultural and public health potential so that development results can be more equitable and prosper the community.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Operate - Maintenance (DBFOM) scheme. The business entity is responsible for:

Sports Venue:

- Main Stadion (only operational)
- Practice field
- Aquatic
- Tennis
- Volley and Basketball
- Badminton
- Martial Sports
- Archery
- Futsal dan Skates
- Rock Climbing

Facilities:

- Hotel (4-star)
- Mall (Shopping center)
- Mosque
- Banten Government Office
- Athlete's Mess
- Clinic
- Security Center

Other Infrastructure and Green Open Space

- Firefighter and Water Treatment Plant
- Accessibility (road)
- Parking Area (Building and field)
- Waste Facility
- Landscape
- City Forest

4. Technical Specification

All the sports venue follow the technical specifications of each governing body of sports association.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Currently, Banten Sports Center Area Development Plan already has an AMDAL document. However, an update may be needed regarding to some updates of the plan.

6. Land Acquisition and Resettlement Action Plan

The land currently identified as Banten Provincial Government-owned property and the permits already handled by the GCA with detailed plan will be provided in the FBC stage (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	USD 34.86 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	10.38%
NPV	USD 3.49 Million

8. Government Support and Guarantee

Based on the results of feasibility calculations previously, it can be concluded that the PPP Project of Banten Sports Center using Alternative 2 (with some adjustments of the non-urgent facilities) is feasible and does not require Government support financially. The government supports including some actions to smoothen the PPP process.

Government guarantee from Indonesia Infrastructure Guarantee Fund (IIGF) / PT Penjaminan Infrastruktur Indonesia (PT PII).

9. Contact Information

Name : DR. Isvan Taufik, ST, MT

Position : Secretary of Public Works and Housing Banten Province (Sekretaris Dinas Pekerjaan Umum dan

Penataan Ruang Provinsi Banten)

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Name : Regen, ST, M.Si

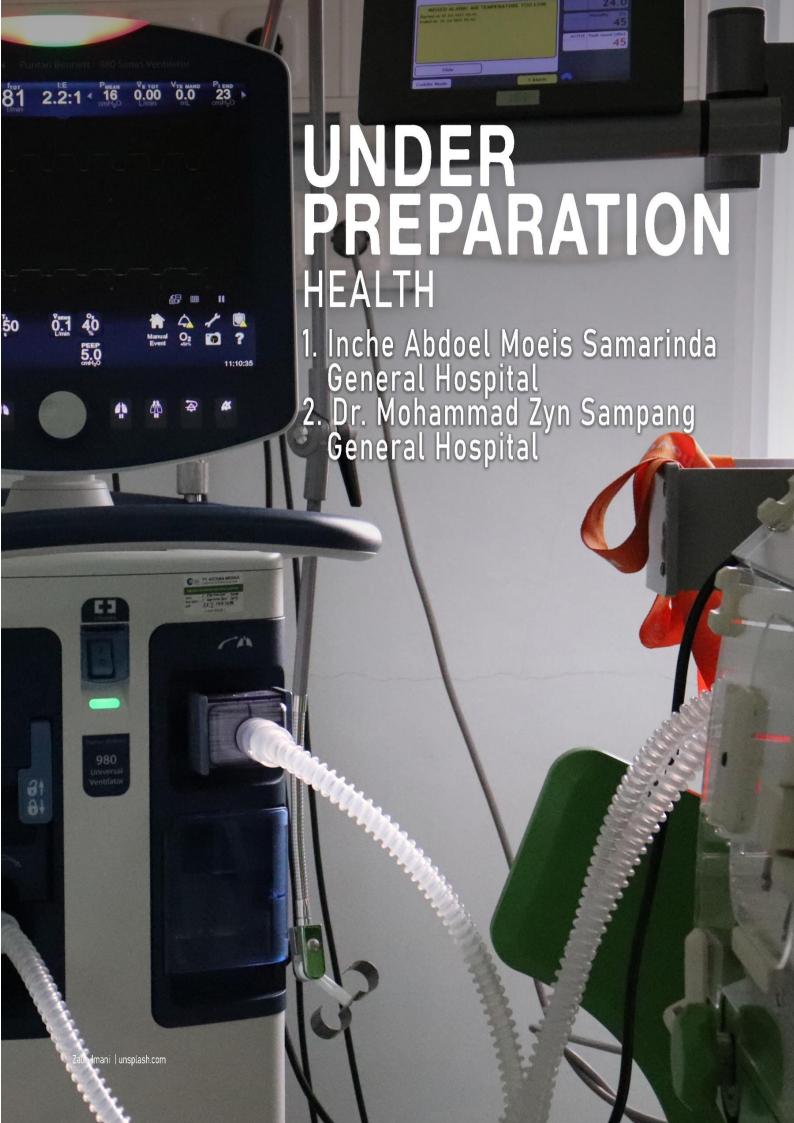
Position : Head of Building and Environment Arrangement (Kasi Penataan Bangunan dan Lingkungan, Dinas

Pekerjaan Umum dan Penataan Ruang Provinsi Banten)

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Inche Abdoel Moeis Samarinda General Hospital

Location: East Kalimantan Province



Government Contracting Agency:

Mayor of Samarinda c.q Health Office of Samarinda

Type of PPP:

Solicited

Return of Investment: User Charge

Sub-Sector: General Hospital

Description:

Inche Abdoel Moeis Samarinda General Hospital is in the development stage of becoming an international standard hospital. The hospital service coverage area can potentially become a Regional Referral for the Provinces of East Kalimantan and North Kalimantan.

Estimated Project Cost: USD 56.3 Million

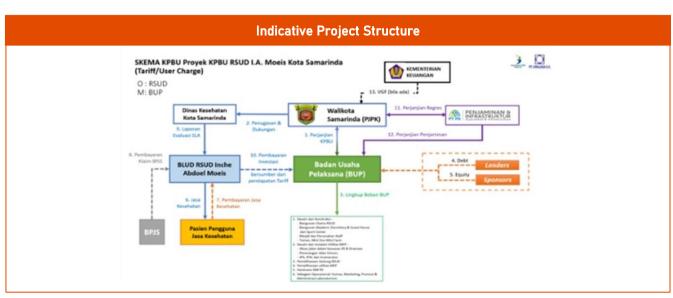
Financial Feasibility:

IRR : 12.78%

NPV: USD 15.60 Million

Estimated Concession Period: Under Review





Project Title	Inche Abdoel Moeis Samarinda General Hospital/General Hospital
Government Contracting Agency	Mayor of Samarinda
Implementing Agency	Health Office of Samarinda
Preparation Agency	Health Office of Samarinda
Project Cost	USD 56.3 Million
Estimated Concession Period	Under Review
Location	East Kalimantan Province

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

The City Government of Samarinda plans to develop the Inche Abdoel Moeis General Hospital with a PPP scheme. Inche Abdoel Moies General Hospital is a Regional Hospital belonging to the City Government of Samarinda which is currently in the development stage to become an International Standard Hospital with the area of hospital service coverage having the potential to become a Regional Referral for the Provinces of East Kalimantan and North Kalimantan. The limitations of Samarinda City's regional budget in financing infrastructure development as stipulated in the Samarinda City RPJMD 2021-2026 have resulted in a funding gap that must be met. To overcome this, the Samarinda City Government uses the Public Private Partnership (PPP) scheme to accelerate the development of Inche Abdoel Moeis Samarinda Hospital.

2.2. Project Description

Inche Abdoel Moeis Samarinda General Hospital is in the development stage of becoming an international standard hospital. The hospital service coverage area can potentially become a Regional Referral for the Provinces of East Kalimantan and North Kalimantan.

2.3. Project Objectives

Inche Abdoel Moeis Samarinda General Hospital is the only hospital owned by the City Government of Samarinda and has the potential to become the closest referral center for patients from districts around Samarinda city, especially from Type C and D hospitals, because it is not only seen from a geographical aspect but also because of the completeness of diagnostic facilities (magnetic resonance imaging (MRI) is available).

The potential target range for patients at Inche Abdoel Moeis Samarinda General Hospital is very large based on the service coverage area of Inche Abdoel Moeis Samarinda General Hospital, which covers Samarinda City to the border of Kutai Kartanegara and East Kutai Regencies. It is hoped that with the construction of Class B hospitals with international standard education, the quality, quantity, and types of health services provided will be increased, as well as by adding facilities, infrastructure, medical devices, human resources, and both medical and paramedical support.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Maintenance - Transfer (DBFMT) scheme. The business entity is responsible for:

- · Experience in setup design and development;
- . Hospital facility maintenance during the concession period;
- · transferring ownership to the government after the cooperation period ends;

4. Technical Specification

In the PPP Scheme, Inche Abdoel Moeis Samarinda General Hospital will consist of:

A. Main Gate

General Hospital Building & Site Development

- 1. General Hospital Building
- 2. Parking Building
- 3. Cancer Center
- 4. Healing Garden
- 5. Bridge
- 6. Site Development (Access Road, Drainage, Street Lighting, Landscape)
- B. IPAL (Wastewater Treatment Plan)
- C. Incenerator
- D. Hardware SIM & RS

More detailed technical specifications will be further studied in the FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the FBC.

6. Land Acquisition and Resettlement Action Plan

The development process of I.A. Moeis General Hospital in the PPP Project for the Development of the Samarinda City Hospital, almost all of the land is owned by the Samarinda City Government as the GCA, but requires a small amount of land acquisition of 1,125 m2 for the plan to build the Main Gate of the Hospital.

The agency responsible for land acquisition is the GCA, which can be carried out before construction. The GCA is responsible for preparing land acquisition planning documents which are a requirement for obtaining location determination in accordance with statutory provisions.

7. Project Cost Structure

Estimated Project Cost	USD 56.3 Million
Estimateu Project Cost	USD 30.3 MILLION
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	12.78%
NPV	USD 15.60 Million

8. Government Support and Guarantee

Government support and guarantee will be identified during FBC preparation.

9. Contact Information

Name : dr. Hj. Syarifah Rahimah, Mkes.,AAAK

Position : Director of RSUD I.A Moeis Samarinda

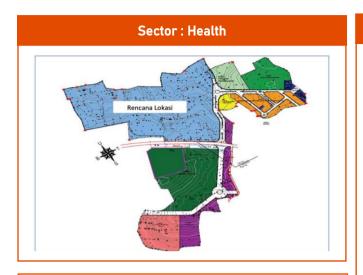
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Email : rsud_iam@yahoo.com



Dr. Mohammad Zyn Sampang General Hospital

Location: East Java Province



Government Contracting Agency:

Regent of Sampang

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: General Hospital

Description:

Dr. Moh Zyn General hospital is a type B hospital and plans to relocate due to frequent flooding in the current location. The only referral hospital for clinics/hospitals around it. However, the current condition is challenging to develop into a standard Type B, and there is a need for additional beds and an area of 27,040 m2. In the new location, apart from hospitals, offices, parks and Islamic centers will be built.

Estimated Project Cost: USD 16.89 Million

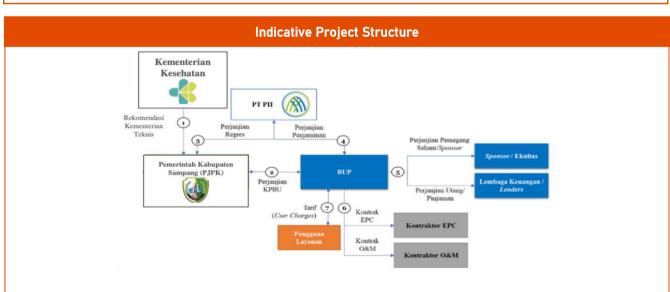
Financial Feasibility:

IRR : 13.7%

NPV : USD 16.20 Million

Estimated Concession Period: 20 years





Project Title	dr. Mohammad Zyn Sampang General Hospital
Government Contracting Agency	Regent of Sampang
Implementing Agency	Sampang Regency Government
Preparation Agency	Sampang Regency Government
Project Cost	USD 16.89 Million
Estimated Concession Period	20 years
Location	East Java Province

1. Project Picture (Map and/or Illustration of Project)



2. The Opportunity

2.1. Project Background

The PPP scheme is expected to be an alternative financing for the development of Dr. Mohammad Zyn Sampang General Hospital through the relocation program. This development plan is expected to fill the shortage of beds per 1000 population. At the moment, bed needs in Sampang Regency still lack around 635 beds. Therefore, Dr. Mohammad Zyn Sampang General Hospital needs to improve fulfillment hospital beds, infrastructure tools, and human resources according to the Class B Hospital criteria technical standards and service quality improvement in accordance with the latest hospital accreditation instrument. In addition, Dr. Mohammad Zyn Sampang General Hospital can become a more representative Referral Hospital if it has services competitive advantage for first tier healthcare facilities and Class D Hospitals in Sampang Regency, even referrals from hospitals in Pamekasan Regency, Bangkalan Regency and Sumenep Regency.

2.2. Project Description

dr. Moh Zyn General hospital is a type B hospital and plans to relocate due to frequent flooding in the current location. The only referral hospital for clinics/hospitals around it. However, the current condition is challenging to develop into a standard Type B, and there is a need for additional beds and an area of 27,040 m2. In the new location, apart from hospitals, offices, parks and Islamic centers will be built.

2.3. Project Objectives

This activity aims to fulfil home service and technology needs in the context of dr. Mohammad Zyn Sampang General Hospital is a referral center throughout Madura Island with the status of a Class B Educational Hospital.

3. Business Entity's Scope of Work

The Project will implement the Design - Build - Finance - Operate (Partially) - Maintenance - Transfer (DBFOMT) scheme. The business entity is responsible for:

- · building assets;
- operating partially within certain scope during the concession period;
- providing services at an agreed level to the community (hospital);
- transferring ownership to the government after the cooperation period ends;

4. Technical Specification

More detailed technical specifications will be further studied in the OBC/FBC report.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC.

6. Land Acquisition and Resettlement Action Plan

The land currently identified as state-owned property and the permits will be handled by the GCA with detailed plan will be provided in the OBC/FBC stage (before the procurement of business entity).

7. Project Cost Structure

Estimated Project Cost	USD 16.891 Million
Indicative Debt to Equity Ratio	
- Debt Level	Under Calculation
- Equity Level	Under Calculation
IRR	13.7%
NPV	USD 16.20 Million

8. Government Support and Guarantee

Government support and guarantee will be identified during OBC/FBC preparation.

9. Contact Information

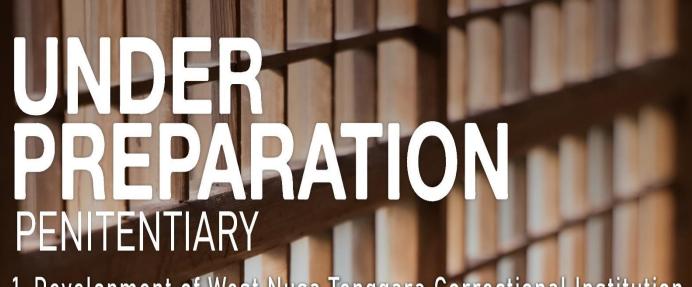
Name : dr. Agus Akhmadi

Position : Director of dr. Moh Zyn Sampang General Hospital

Phone : 0811314949

Email : -





1. Development of West Nusa Tenggara Correctional Institution

Development of West Nusa Tenggara Correctional Institution

Location: Lombok Island, West Nusa Tenggara



Government Contracting Agency:

Minister of Law and Human Rights

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Correctional Facility

Description:

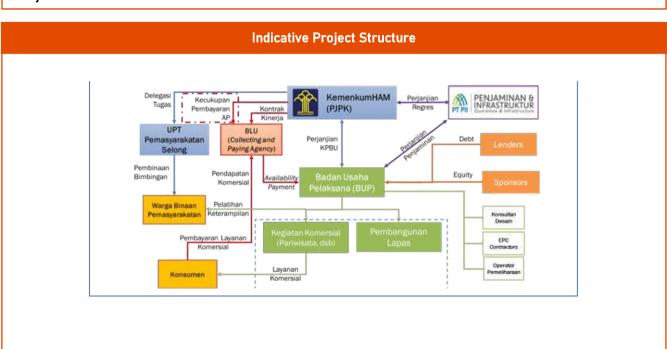
The Ministry of Law and Human Rights (KemenkumHAM) plans to build a LAPAS by utilizing land located on the island of Lombok, West Nusa Tenggara Province. This location is currently used as an Assimilation and Education Facility (SAE) for Correctional Assisted Residents (WBP) at Selong LAPAS, East Lombok Regency. The main thought of the scope of the assigned PPP project is to provide LAPAS by utilizing the tourism potential at the SAE location which will be managed by private companies. Seeing the situation from the SAE location, the land area on the Right to Use Certificate owned by the Ministry of Law and Human rights is 153,500 m2. The land around the beach is used for recreation by local residents with an area of around 25.000 m2 and the remaining 130.000 m2 is dry land without irrigation.

Estimated Project Cost: USD 10.14 million Financial Feasibility:

IRR : 29.1% NPV : USD 148,266

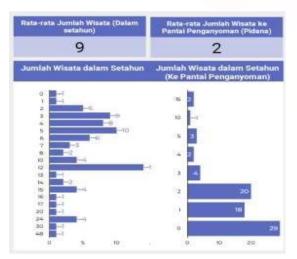
Estimated Concession Period: 20 years

Indicative Project Schedule Request for Proposal Q2 2023 Project Status: Outline Business Case Indicative Project Schedule Request for Proposal Q4 2023 Bid Award Q4 2023 Agreement Signing Q1 2024 Q1 2024 Financial Close Q2 2024 Construction 2024-2026



Project Title	Development of West Nusa Tenggara Correctional Institution
Government Contracting Agency	Ministry of Law and Human Rights
Implementing Agency	Director General of Correctional
Preparation Agency	Director General of Correctional
Project Cost	USD 10.14 Million
Estimated Concession Period	20 years
Location	Selong , West Nusa Tenggara

1. Project Picture (Map and/or Illustration of Project)



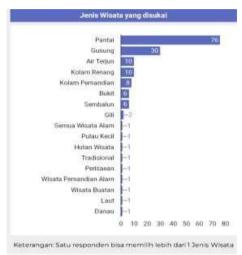


Figure 1 – Map of Illustration of the respondent's tourism activity profile, including visits to the protection (criminal) beach

2. The Opportunity

2.1. Project Background

Based on the preliminary study report that has been prepared, an indication of the scope of the Land Use PPP in the West Nusa Tenggara Region includes the construction of Correctional Institutions (LAPAS) facilities and other supporting facilities by the private sector and the exploitation of commercial activities around LAPAS in the form of tourism activities to get a return on investment.

In the Regulation of the Minister of National Development Planning/Bappenas No. 4 of 2015, sources of return on investment, borrowing costs and reasonable profits from the business entity can be grouped into 3 sources of return, namely:

- 1. Tariffs charged to users
- 2. Service availability/Availability Payment
- 3. Other forms in accordance with the laws and regulations

In this Land Utilization PPP project in the West Nusa Tenggara Region, sources of returns will be discussed with the GCA and also need to be provided with a legal basis so that they do not conflict with laws and regulations and can accommodate private interests in running their business and returning investments in the PPP project. Financial and commercial studies as well as risks will also be influential in determining the source of returns that will attract investors to invest in this Land Utilization PPP project in the West Nusa Tenggara Region.

2.2. Project Description

The Ministry of Law and Human Rights (KemenkumHAM) plans to build a LAPAS by utilizing land located on the island of Lombok, West Nusa Tenggara Province. This location is currently used as an Assimilation and Education Facility (SAE) for Correctional Assisted Residents (WBP) at Selong LAPAS, East Lombok Regency. The main thought of the scope of the assigned PPP project is to provide LAPAS by utilizing the tourism potential at the SAE location which will be managed by private companies. Seeing the situation from the SAE location, the land area on the Right to Use Certificate owned by the Ministry of Law and Human Rights is 153,500 m2. The land around the beach is used for recreation by local residents with an area of around 25,000 m2 and the remaining 130,000 m2 is dry land without irrigation. Project Objectives.

2.3 Project Objectives

Land use in the West Nusa Tenggara Region through the Government Cooperation Scheme with Business Entities in Provision of Infrastructure is to overcome the problem of overcrowding in Correctional Institutions and State Detention Centers, as well as the utilization of land for use as a tourist/commercial area. The objectives of implementing land use activities in the West Nusa Tenggara region through the Public Private Partnership scheme in the Provision of Infrastructure are as follows, among others:

- a. Improving the quality of coaching services for correctional inmates;
- b. Increase the number of residential capacity of correctional inmates;
- c. Overcome the government's budget shortage in the development of correctional infrastructure;
- Increasing the value of unused vacant land owned by the West Nusa Tenggara (NTB) Legal and Human Rights Regional Office;
- e. Improving and driving the economy of the local community;
- f. Improving the welfare of the local community

3. Business Entity's Scope of Work

The Land Utilization PPP Project in the West Nusa Tenggara Region is planned to carry out two activities, namely the construction of a new LAPAS and the construction of commercial activities with indications that there are 6 commercial activities to be carried out on the project land. The scope of cooperation between the government and business entities in the Land Use PPP project in the West Nusa Tenggara Region is as follows:

- a. Construction of a new LAPAS building on the land of the Ministry of Law and Human Rights
 - i. The Ministry of Law and Human Rights through the Directorate General of Corrections carries out LAPAS Operations;
 - Business Entities carry out Planning, Development, Financing and Maintenance of LAPAS and will be submitted to the GCA after the concession period ends (PPP form: Design – Build – Finance – Maintenance – Transfer / DBFMT);
- b. Development of commercial activities

The Business Entity carries out the Planning, Development, Financing, Operation and Maintenance of commercial activities by the Business Entity and will be submitted to the GCA after the concession period ends (Design - Build - Finance - Operation - Maintenance - Transfer / DBFOMT).

4. Technical Specification

The technical specifications for Correctional Institutions are as follow:

Based on Article 1 paragraph (3) of Law 12/1995, a penitentiary is a place to carry out coaching for prisoners and correctional students. The implementation of correctional institutions is carried out in order to form correctional inmates who can become whole human beings, realize mistakes, improve themselves and no longer repeat criminal acts so that they can be accepted again in the community, can play an active role in development and live normally to become good and responsible citizens, answer. Guidance and guidance of correctional inmates includes activities in the form of personality development and independence. Personality development includes mental and character development so that the inmates become whole human beings, while the development of independence includes skills and talent development so that the inmates can return to their roles as free and responsible members of society. Correctional institutions were established in each district or municipal capital.

In carrying out coaching for convicts in correctional institutions, the necessary facilities and infrastructure are provided, which include coaching, worship equipment, educational equipment, workshop equipment and sports and arts equipment. Article 4 paragraph (1) Decree of the Minister of Justice No. M.01.PR.07.03/1985 states that the classification of correctional institutions is divided into capacity, location and place of work.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

In accordance with Article 21 and Article 22 of the Job Creation Number Law no. 11 of 2020 concerning Protection and Management of the Environment, and PP 22 of 2021 concerning Implementation and Protection of the Environment, as well as Minister of Environment and Forestry Regulation number 04 of 2021 concerning List of Businesses and/or Activities Required to Have an Analysis of Environmental Impacts, Environmental Management Efforts And Environmental Monitoring Efforts or a Statement of Ability to Manage and Monitor the Environment, then the construction of Tourism and Correctional Buildings in the Selong Eco-Ancient Park (SEAP) activity area with an area of 15.3 Ha (more than 5 Ha) will be carried out must have an AMDAL document.

Based on these provisions, the PPP Business Entity as the party responsible for the business and/or activities to be carried out related to the Project, is required to obtain Environmental Approval by preparing AMDAL Documents to be able to carry out the SEAP Project. For this reason, Bappenas Regulation No. 4/2015 places the responsibility for the GCA to prepare the AMDAL document which consists of:

- Terms of Reference for Environmental Impact Analysis (KA-ANDAL);
- Environmental Impact Analysis (ANDAL); And
- Environmental Management Plan and Environmental Monitoring Plan (RKL-RPL) as the basis for evaluation to obtain an Environmental Permit from the Minister/Head.

For businesses/activities that are required to have an EIA, the application is submitted TOGETHER or BEFORE submitting an application for Environmental Approval. For Businesses/activities Mandatory UKL-UPL Applications are submitted BEFORE submitting an application for Environmental Approval. The schedule for the preparation of the SEAP Development AMDAL Document is based on the stages of preparation and procedures for submitting the AMDAL Document starting from the Approval of Terms of Reference, Preparation of ANDAL Documents and RKL-RPL. Preparation of Technical Approval for Fulfillment of Wastewater Quality Standards, up to the finalization process with the output in the form of Issuance of Environmental Approval

6. Land Acquisition and Resettlement Action Plan

Implementation of utility support in current planning supported by adequate data involving Project Affected Persons (PAPs) in Bleeding Back planning.

7. Project Cost Structure

Estimated Project Cost	USD 10.14 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
FIRR	29.1%
NPV	148,266

8. Government Support and Guarantee

The GCA would need to facilitate the project by means of:

Provision of government incentives/support has been taken into account in the financial analysis where in the return on investment scheme with Availability Payment (AP), in the AP-2 scenario the provision of incentives/support from the government of 30% of the Capex cost component (Rp 48,516 billion) will reduce the value of the AP that GCA must pay to Business Entities from IDR 34.42 billion in the first year (in the AP-1 scenario) to IDR 23 billion in the first year (in the AP-2 scenario). This also applies to the AP scenario with an optimistic income assumption (scenarios AP-3, AP-4, and AP-5).

It should be noted that if the AP scheme is used, the PPP project is not allowed to receive Viability Gap Fund (VGF) support from the Ministry of Finance so that support/incentives must come from other sources such as from the GCA, in this case the Ministry of Law and Human Rights. Whereas in the return on investment scheme with other income (unregulated tariff), support/incentives from the government are needed so that the project is still financially feasible (Equity IRR reaches 14%) with the amount of incentive/support needed is 33% of the value of Capex (Rp 53,922 Billion).

9. Contact Information

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Bina Harapan Cisaranten Housing

Location: Bandung, West Java Province

Sector: Public Housing



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

Under Review

Sub-Sector: Affordable Housing

Description:

On a 5-hectare land parcel, a development project is underway to construct affordable housing units alongside commercial facilities. The project encompasses eleven towers, and it is estimated to have a potential of accommodating approximately 2,738 housing units. This endeavor aims to provide affordable housing options while also incorporating commercial spaces, creating a vibrant and sustainable community within the development.

Estimated Project Cost: USD 54.05 million

Financial Feasibility:

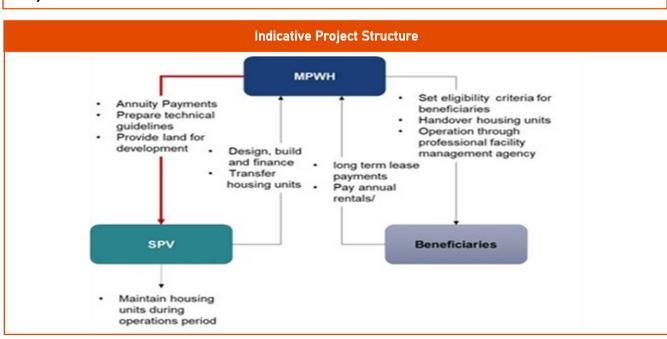
IRR : 12.5% (Under Review)

NPV : USD 11.71 million (Under Review)

Estimated Concession Period: 15 years

Indicative Project Schedule PreQualification Q3 2023 Bid Award Q4 2023 Agreement Signing Q4 2023 Q4 2023 Q4 2024 Construction Q4 2025 Q4 2025

Project Status: Final Business Case



Project Digest

Project Title	Bina Harapan Cisaranten Housing
Government Contracting Agency	Minister of Public Works and Housing
	Directorate General of Public Works and
	Housing Infrastructure Financing
Preparation Agency	Directorate General of Public Works and
	Housing Infrastructure Financing (MoF's PDF)
Project Cost	USD 54.05 Million
Estimated Concession Period	15 years
Location	Komplek Pusjatan. Jalan. AH. Nasution,
	Bandung City, West Java

1. Project Picture (Map and/or Illustration of Project)



Figure 1 - Masterplan of Cisaranten Housing Complex

2. The Opportunity

2.1. Project Background

Indonesia is undergoing rapid urbanization. As per the "Project Appraisal Document of IBRD's National Affordable Housing Program project", the country's cities are growing at a rate of 4.1% per year between the years 2000 to 2010, faster than other Asian countries (compared to 3.8 percent in China, 3.1 percent in India and 2.8 percent in Thailand). In 2012, the urban population was 52% of the total population and by 2025, nearly 68% of the Indonesians will be living in cities. Approximately 18 million of the 21 million jobs created between 2001 and 2011 were in urban areas, marking a major shift of the employment base toward cities.

As more people transition to urban areas, well-planned urbanization and an increase in the supply of affordable housing in well serviced and well-connected neighborhoods will be critical to enhancing living standards. Also, as income rises and existing large metropolitan cities such as Jakarta and Surabaya become saturated, there is a need to provide affordable housing facilities to the next big cities. Bandung, which is the third largest city in Indonesia is growing fast and needs urgent interventions in the development of

infrastructure and provision of affordable housing stock for its citizens. This project is proposed by the GCA to meet the residential needs of persons in the low-income segment in Bandung.

2.2. Project Description

Ministry of Public Works and Housing preliminary concept development of affordable housing plus commercial exploitation on a land parcel of 5 Hectares, consisting of eleven towers (4 Rusunawa, 3 Affordable housing, 4 commercial housing) with an approximate potential of 2,738 housing units (1008 Rusunawa, 802 affordable housing, 828 commercial housing)

2.3. Project Objectives

To complement its public housing program and provide a fillip to private participation in the affordable housing program, the Ministry of Public Works and Housing (PUPR) has identified one parcel of land namely, Komplek Pusjatan Jl. AH. Nasution in Bandung City, for the development of affordable housing units and through a PPP route. Affordable housing projects with public housing rental rates would require substantial support from the GCA in the form of availability payments for financial viability through PPP. The project would explore partial commercial exploitation of the site to cross subsidize the low rentals and reduce the burden of availability payments for the GCA.

3. Business Entity's Scope of Work

Design - Build - Finance - Maintain and Transfer (Under Review).

4. Technical Specification

This housing project falls in the form of a Flat building under the classification of High Rise. Regulations to set minimum service standards for flats are contained in the provisions of Article 80 letter f of Law 20 of 2011. The regulation includes the specification for Residential Services, Managing Office, Utilities, Cleaning and Waste Management, Information, Security, Safety, Accessibility for Disabled People, Parking, and Maintenance Code. Project construction refers to MPWH Regulation 2/PRT/M/2012 Green Building.

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Environmental Impact will be assessed during project preparation stage (FBC).

6. Land Acquisition and Resettlement Action Plan

The land for the project admeasuring 5 hectares is owned by Ministry of Public Work and Housing as State-Owned Asset (Barang Milik Negara/BMN). There is 4360 sqm of land (the Cow Shed Land) that needs to be acquired. Therefore, no resettlement plan is needed.

7. Project Cost Structure AP Model

Estimated Project Cost	USD 54.05 Million	
Indicative Debt to Equity Ratio		
- Debt Level	80%	
- Equity Level	20%	
IRR	12.5% (Under Review)	
Equity IRR 15% (Under Review)		
NPV	USD 11.71 Million (Under Review)	

8. Government Support and Guarantee

Indicative government support will be in the form of Environmental Permit, Location Permit, Design Certifications, Project Development Facility, Land Acquisition, Rent Agreement, Guarantee etc.

9. Contact Information

Name : R Haryo Bekti Martoyoedo

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Sei Mangkei Public Housing

Location: North Sumatera Province



Government Contracting Agency:

Governor of North Sumatera

Type of PPP:

Solicited

Return of Investment:

User Payment

Sub-Sector: Affordable Housing

Description:

To cater to the housing requirements of workers in the Sei Mangkei Industrial Area, a project has been planned to construct three towers of rental flats. Each tower will be comprised of 18 floors and accommodate a total of 672 units. Additionally, one of the apartment towers will have 16 floors with 132 rooms, while the other tower will be a 15-floor hotel. The project will be developed on a land area spanning 3.3 hectares, providing an adequate living space for the industrial area's workforce.

Estimated Project Cost: USD 76.63 Million

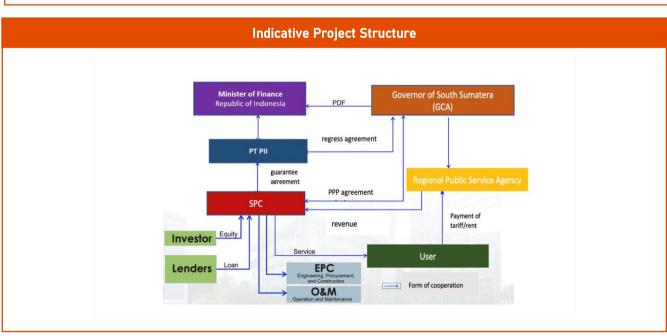
Financial Feasibility:

IRR : 11.14%

NPV: USD 3.98 Million

Estimated Concession Period: 20 years



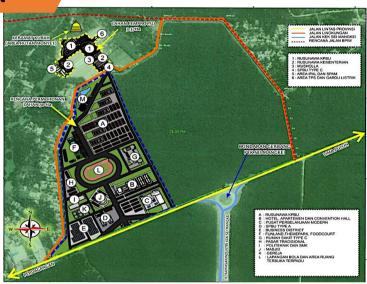


Project Digest

Project Title	Sei Mangkei Public Housing	
Government Contracting Agency	Governor of North Sumatera	
Implementing Agency	Housing Agency of North Sumatera	
Preparation Agency	Housing Agency of North Sumatera (MoF's PDF)	
Project Cost	USD 76.63 Million	
Estimated Concession Period	20 years	
Location	North Sumatera Province	

1. Project Picture (Map anor Illustration of Project)

SITE PLAN



Picture 1 - Sei Mangkei Public Housing

2. The Opportunity

2.1. Project Background

The special economic zone of Sei Mangkei was built to develop economic activities in the Sei Mangkei area which are strategic for the development of the national economy. Sei Mangkei industrial area has several companies that are actively operating. The number of companies each year is still growing and indicates that there will be an addition and an increase of workers in Sei Mangkei. Therefore, it is necessary to provide facilities in the form of housing that is close to the location of the workers.

2.2. Project Description

The area for integrated Rusunawa for the special economic zone of Sei Mangkei workers is 33,000 m². That area will be utilized for residential functions (Rusunawa, apartment, hotel), commercial functions (shopping center, gas station), mosques and green areas.

2.3. Project Objectives

Providing housing facilities, shopping areas, green areas, and other facilities.

3. Business Entity's Scope of Work

Design-Build-Finance-Operation-Maintenance-Transfer

4. Technical Specification

- a. Rusunawa consists of 3 towers (each tower consists of 18 floors and 224 units)
- b. 1 tower apartment consists of 16 floors with 120 units (60 units of type 64 m² and 60 units of type 36 m²
- c. The hotel consists of 15 floors with a swimming pool facility
- d. The shopping center consists of 3 floors in 3500 m² area
- e. The Green area of 7500 m²
- f. Mosque
- g. Gas station
- h. Playground 1.050 m²

5. Environmental Impact Assessment (EIA/AMDAL) Findings

The RPL/RKL have finished prepared by the Housing Agency of North Sumatera

6. Land Acquisition and Resettlement Action Plan

The land development area needed for this project is estimated at 50 Ha located around KEK Sei Mangkei (Land of PTPN III Special Economic Zone) and now by process administration include will be paid through budged funds.

7. Project Cost Structure

Estimated Project Cost	USD 76.63 Million
Indicative Debt to Equity Ratio	
- Debt Level	70%
- Equity Level	30%
IRR	11.14%
NPV	USD 3.98 Million

8. Government Support and Guarantee

From the Outline Business Case, there is an indication that this project needs the Viability Gap Fund to be financially viable. This project will also needs government guarantee.

9. Contact Information

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Position : Coordinator of Experts KPBU Public Housing Sei Mangkei North Sumatera

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Email: timkpbusumut21@gmail.com

Karawang Spuur Public Housing

Location: Karawang Regency, West Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Affordable Housing

Description:

Karawang Spuur Housing PPP Project is a public housing project on a 1.9 ha Ministry of MPWH-owned land. The location of the PPP project is located on Jalan Karawang Spuur, Wadas Village, East Telukjambe District, Karawang, West Java. The land is located in the urban area of Karawang, a few minutes from schools, universities, and industrial areas. Besides that, the location has high accessibility, minutes away from the West Karawang 1 toll gate, and the Karaba Indah bus stop. The project will cover the construction of 2 towers, resulting in 1.175 residential units.

Estimated Project Cost: USD 27.25 Million (Under Review)

Financial Feasibility:

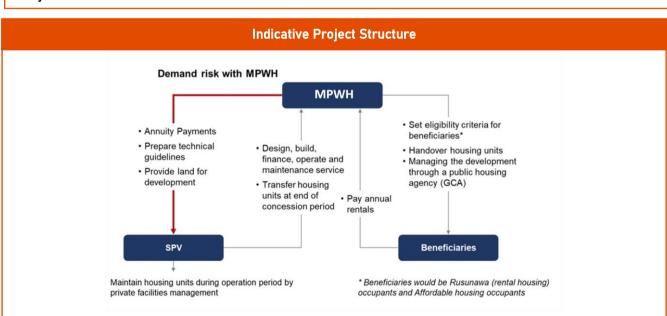
IRR: 10.88% (Under Calculation)

NPV : USD 1.95 Million (Under Calculation)

Estimated Concession Period: 22 Years (include 2

years of construction period)





Project Digest

oject Title Karawang Spuur Public Housing	
Government Contracting Agency	Minister for Public Works and Housing
Implementing Agency	Directorate General of Public Works and Housing Infrastructure Financing
Preparation Agency	Directorate General of Public Works and Housing Infrastructure Financing
Project Cost	USD 27.25 Million (Under Review)
Estimated Concession Period	22 Years (include 2 years of construction period)
Location	Karawang Regency, West Java Province

1. Project Picture (Map and/or Illustration of Project)



Figure 1 - Layout of Karawang Spuur Public Housing



Figure 2- Masterplan of Karawang Spuur Public Housing

2. The Opportunity

2.1. Project Background

Indonesia is undergoing rapid urbanization. As per the "Project Appraisal Document of IBRD's National Affordable Housing Program project", the country's cities are growing at a rate of 4.1% per year between the years 2000 to 2010, faster than other Asian countries (compared to 3.8 percent in China, 3.1 percent in India and 2.8 percent in Thailand). In 2012, the urban population was 52% of the total population and by 2025, nearly 68% of the Indonesians will be living in cities. Approximately 18 million of the 21 million jobs created between 2001 and 2011 were in urban areas, marking a major shift of the employment base toward cities.

The direction of housing finance policy focused on national development priorities, which are mainly for the region/region: (a). Industrial zone / KEK, (b). Tourism area, (c). the development of a green city with climate and disaster resistance, (d). A Smart city that is competitive and based on Communication Technology, (e). village and city linkages (f). border area with 10 (ten) neighboring countries 187 (one hundred eighty-seven) priority locations, including 92 (ninety- two) outer islands), (g). disadvantaged areas, and (h). support for reducing the burden of the poor and vulnerable population, as well as a program to accelerate national development strategic projects by the formulation of the objectives of the Ministry of Public Works and Public Housing is to expand access to adequate housing financing facilities for MBR that are equipped with adequate facilities and infrastructure for all community groups in a fair manner and approach demand management with national priorities.

For this reason, the government continues to strive to realize decent housing for MBR that is in line with the direction of the housing finance policy in the priority development areas/regions, and one of them is Karawang

This project is structured to make the National Mid-Term Development Plan more concrete in resolving development issues, measurable and the benefits can be directly understood and felt by the community. These projects have strategic value and high leverage to achieve development priority targets. One of the major projects of the Ministry of PUPR is the construction of Urban Flats.

2.2. Project Description

Karawang Spuur Housing PPP Project is a public housing project on a 1.9 ha Ministry of MPWH- owned land. The location of the PPP project is located on Jalan Karawang Spuur, Wadas Village, East Telukjambe District, Karawang, West Java. (Coordinates: -6.3283005, 107.276151).

Karawang Spuur Housing PPP Project located in the Karawang Transit Oriented Development (TOD) development area. The land is located in the urban area of Karawang, a few minutes from schools, universities, and industrial areas. Besides that, the location has high accessibility, minutes away from the West Karawang 1 toll gate, and the Karaba Indah bus stop. The project will cover the construction of 2 towers, resulting in 1.175 residential units and several public purposes, such as co-working spaces, green areas, commercials, and other social facilities.

2.3. Project Objectives

Providing housing facilities, shopping areas, green areas, and other facilities.

3. Business Entity's Scope of Work

Design-Build-Finance- Maintenance- Operation-Transfer

4. Technical Specification

Karawang SPUUR Public Housing				
Public Housing Type	Public H	Public Housing for Rent Mixed use		
Allocation	Occupancy	Low Income CommunitiesNon - Low Income Communities		
	Non-Occupancy	 Green Open Space Shops Sports Facilities Clinic Shopping Center 		
Number of Towers		2 Towers		
Number of Floors	2	27 Floors per Tower		
Number of Units		1,450 Units		

5. Environmental Impact Assessment (EIA/AMDAL) Findings

Any environmental document requirement will be identified in the OBC/FBC.

6. Land Acquisition and Resettlement Action Plan

The current status of the Karawang Spuur land is a Letter of Release of Rights, to avoid future land status problems, before the development process is carried out, an increase in the legality of the land status from the Release of Rights to a Certificate is carried out. In this case, the National Land Agency Office of Karawang Regency is ready to support the process of enhancing the legality of land status.

7. Project Cost Structure AP - Model

Estimated Project Cost	USD 27.25 Million (under review)	
Indicative Debt to Equity Ratio		
- Debt Level	70%	
- Equity Level	30%	
IRR	10.88% (Under Calculation)	
NPV	USD 1.95 million (Under Calculation)	

8. Government Support and Guarantee

Government Support and Guarantee will be identified in the OBC/FBC.

9. Contact Information

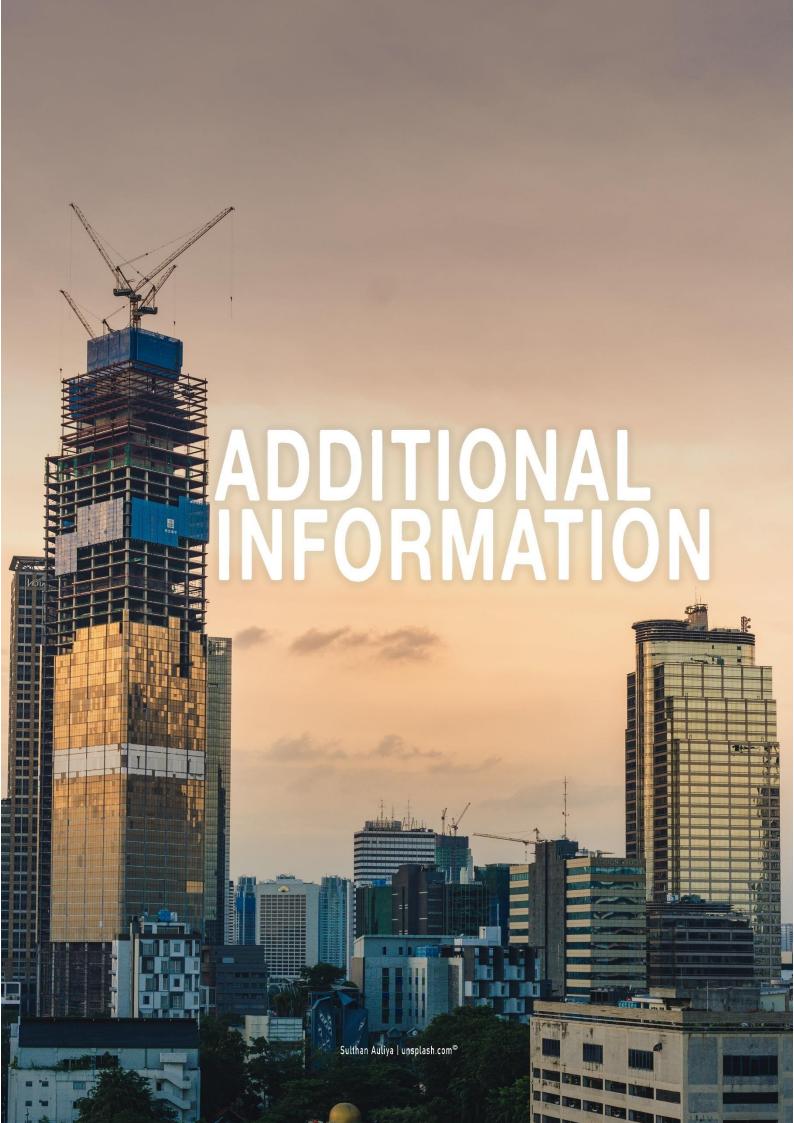
Name : R Haryo Bekti Martoyoedo

 ${\bf Position} \quad : {\bf Director} \ {\bf for} \ {\bf Housing} \ {\bf Financing} \ {\bf Implementation}$

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Summary of Already Tendered Projects

The following list consists of projects that have already been tendered as of May 2023.

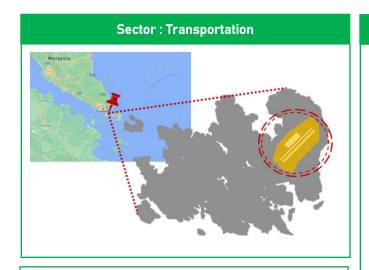
No	Project Name	Description	Status (per May 2023)
1.	Expansion of Hang Nadim International Airport Passenger Terminal	The project is to expand the passenger terminal of Hang Nadim International Airport and designated to handle up to 24.7 million passengers in 2046. Scope of work: • Refurbishment and expansion of Passenger Terminals; • Operation and Maintenance Passenger Terminal; and • Operation and Maintenance Cargo Terminal.	Already Tendered (Agreement Signing)
2.	New Airport in Kediri (Unsolicited)	The New Airport Project is proposed with a 3.300 m x 45 m of runway and 70.000 m² passenger terminal building for serving 10 mppa. The airport aims to increase the economic and social activities of the community through the development of connectivity between Kediri District and centers of economic activity both at the national and global levels.	Already Tendered (Agreement Signing)
3.	Patimban Port	Patimban Port in Subang (West Java) designated as a national strategic project (PSN) located near Cikarang Industrial Zone to support trading activities in Java, the country's most populated island and center of its manufacturing activities.	Already Tendered (Agreement Signing)
4.	Gedebage – Tasikmalaya – Cilacap Toll Road (Unsolicited)	The project is to construct 206.65 km toll road of Gedebage-Tasikmalaya-Cilacap which is expected to overcome traffic problems and encourage economic and regional growth. This toll road is equipped with 1 junction and 10 interchanges.	Already Tendered (Agreement Signing)
5.	Patimban Access Toll Road	The New Patimban Port development plan is to provide accessibility that facilitates direct access to and from Patimban Port. The port is planned to be connected with industrial zones, economic zones, urban areas, and the surrounding rural areas. Patimban access toll road will connect Patimban Port with Cikopo - Palimanan Toll Road Section. This toll road will be 37.05 km long with 4 interchanges and 1 junction.	Already Tendered (Agreement Signing)
6.	Cikunir – Ulujami Jakarta Outer Ring Road (JORR) Elevated Toll Road (Unsolicited)	The project is to construct ± 21.5 km of The Cikunir-Ulujami Jakarta Outer Ring Road (JORR) Elevated Toll Road with PPP scheme. The starting point is located at Ulujami Junction and the end point is located at Jati Asih Junction.	Already Tendered (RfP)
7.	South Sentul – West Karawang Toll Road (Unsolicited)	The project is to construct ± 61.5 km of The South Sentul – West Karawang Toll Road which connecting Sentul Junction and Karawang Junction. At the South Sentul – West Karawang TollRoad there are 3 junctions that connect to the Bogor Ring Road Toll Road, the Jakarta – South Cikampek Toll Road, and the existing Jakarta – Cikampek Toll Road.	Already Tendered (RfP)

No	Project Name	Description	Status (per May 2023)
8.	Bogor – Serpong (via Parung) Toll Road (Unsolicited)	The project is to construct ±31.117 km of Bogor- Serpong toll road which is expected to overcome traffic problems and encourage economic and regional growth. This toll road is equipped with five interchanges and two junctions.	Already Tendered (RfP)
9.	Kamal – Teluk Naga – Rajeg Toll Road (Unsolicited)	38.6 km Kamal-Teluknaga-Rajeg Toll Road is located in North Jakarta (DKI Jakarta Province) and Tangerang Regency (Banten Province). This toll road is planned as part of the toll road network system in the Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi) area and will support Pantura strategic area.	Already Tendered (RfP)
10.	North Penajam Paser - Balikpapan Toll Road Bridge (Unsolicited)	The construction of the bridge (which functions as a toll road) will connect the North Penajam Paser Regency with Balikpapan City across the Bay of Balikpapan. The North Penajam Paser - Balikpapan Toll Road Bridge will not only eliminate the geographical obstacle between the North Penajam Paser Regency and the Balikpapan City, but also between East Kalimantan and South Kalimantan Provinces.	Already Tendered (PQ)
11.	Kediri – Tulungagung Toll Road (Unsolicited)	The project is to construct a ±44.51 km toll road of Kediri-Tulungagung which is expected to encourage economic and regional growth for the south part of East Java and also become an access road to Kediri Airport. This toll road plan is equipped with 2 junctions and 3 interchanges.	Already Tendered (RfP)
12.	Development of the Trans Papua Jayapura - Wamena Road	The Trans Papua Mamberamo – Elelim road section is located in Papua Province which is part of the Trans Papua Road section that connects the Jayapura area with Wamena. The location of the road preservation work starts from the direction of Wamena KM 366+690 with a handling length of 50.14 Km.	Already Tendered (PQ)
13.	Karian – Serpong Regional Water Supply System (Unsolicited)	Karian-Serpong Regional Water Supply System project is developed to accelerate the expansion of piped water supply for DKI Jakarta, Tangerang City, and South Tangerang where the bulk water will be sourced from the Karian Dam in Banten Province.	Already Tendered (Agreement Signing)
14.	Legok Nangka Regional Waste Processing Facility	Management of 1,853 – 2,131 tonnes waste per day of sourced from 6 municipalities (Bandung Regency, Bandung City, Sumedang Regency, Cimahi City, West Bandung Regency, and Garut Regency) located in Legok Nangka, Nagreg, West Java. Scope: Design, Build, Finance, Operate, maintain the Waste Treatment Plant and supporting infrastructure.	Already Tendered (PQ)

No	Project Name	Description	Status (per May 2023)
15.	Bintang Bano Dam Maintenance and Provision of Mini Hydro Power Plant in West Nusa Tenggara (Unsolicited)	MHPP Bintang Bano is the first Unsolicited Water Resources PPP project using a user charge return on investment scheme. The project scope are provision of Mini Hydro Power Plant Capacity 6,3 MW which implemented under Design-Build-Finance-Operate-Maintenance-Transfer (DBFOMT) scheme and maintenance of Bintang Bano Dam.	Already Tendered (RfP)
16.	Surakarta Street Lighting	The Municipal Government of Surakarta is proposing to revitalize the PSL public services within the city, covering 976 km city road network needs around 31,890 lamp points. The project will be implemented in PPP Scheme. The scheme will include PPP agreement between the Municipal and the Business Entity along the specified concession period that requires the Business Entity to finance, design, develop, operate, and maintain the PSL service.	Already Tendered (PQ)
17.	Arrangement and Management of West Lombok Public Street Lighting (Unsolicited)	The West Lombok Regency planned to install and maintain its street lighting using Public Private Partnership. It is hoped that this street project lighting will help increase the economy and public welfare in the regency by ensuring road safety by street lighting during the night.	Already Tendered (PQ)
18.	Dharmasraya Street Lighting (Unsolicited)	Replacing Mercury type Street Lamps with LEDs with Total of 4.135 in 11 Districts in Dharmasraya. The project scope are design, build, finance, operate, maintain and transfer the Street Lamps.	Already Tendered (PQ)

Expansion of Hang Nadim International Airport Passenger Terminal

Location: Batam, Riau Islands Province



Government Contracting Agency:

Chairman of Batam Indonesia Free Zone Authority

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Airport

Description:

The project is to expand the passenger terminal of Hang Nadim International Airport and designated to handle up to 24.7 million passengers in 2046.

Scope of work:

- Refurbishment and expansion of Passenger Terminals;
- Operation and Maintenance Passenger Terminal; and
- Operation and Maintenance Cargo Terminal.

Estimated Project Cost: USD 466.14 Million

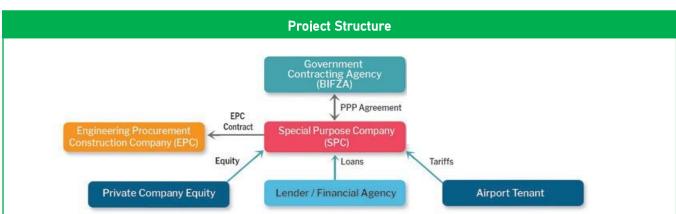
Financial Feasibility:

IRR : 14,73%

NPV : USD 3.17 Million

Consession period: 25 years





Contact Person

: Ponco Indro Subekti (Head of Transportation Planning BP Batam)

+62-812-6130-3737

bthpppteam@bpbatam.go.id or bthpppteam@gmail.com

New Airport in Kediri

Location: Kediri District, West Java



Government Contracting Agency:

Minister of Transportation

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Airport

Description:

The New Airport Project is proposed with a 3.300 m x 45 m of runway and 70.000 m² passenger terminal building for serving 10 mppa. The airport aims to increase the economic and social activities of the community through the development of connectivity between Kediri District and centers of economic activity both at the national and global levels.

Estimated Project Cost: USD 610.90 Million

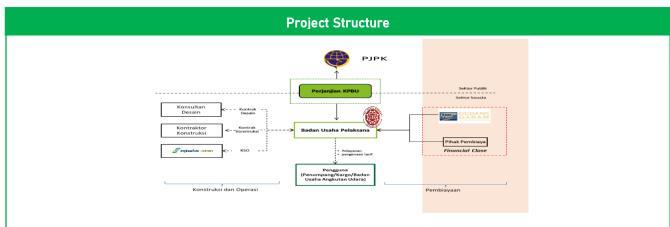
Financial Feasibility:

IRR : 9.48%

NPV: USD 59.05 Million

Estimated Concession Period: 50 years





Contact Information : Arief Mustofa (Deputy Director Airport Business and Management) +62 815 9419511

+02 013

Patimban Port

Location: Subang, West Java Province



Government Contracting Agency:

Minister of Transportation hand over to Director General of Sea Transportation

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Port

Description:

Patimban Port in Subang (West Java) designated as a national strategic project (PSN) located near Cikarang Industrial Zone to support trading activities in Java, the country's most populated island and center of its manufacturing activities.

Estimated Project Cost: USD 1,422.78 Million*

Financial Feasibility:

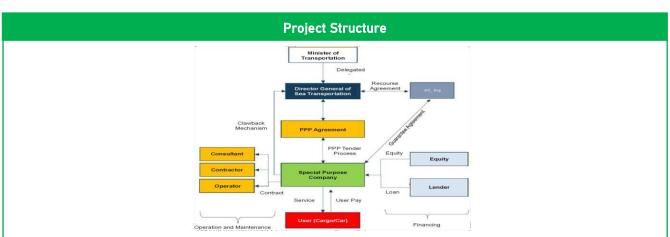
IRR : 14.9%

NPV: USD 100.34 Million

Estimated Concession Period: 40 years

*) Capex





Contact Information : Muhammad Masyhud (Head of Port Development Planning Sub-Directorate)

kpbupelabuhan@gmail.com

Gedebage - Tasikmalaya - Cilacap Toll Road

Location: West Java - Central Java



Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project is to construct 206.65 km toll road of Gedebage-Tasikmalaya-Cilacap which is expected to overcome traffic problems and encourage economic and regional growth. This toll road is equipped with 1 junction and 10 interchanges.

Estimated Project Cost: USD 3,797.54 Million

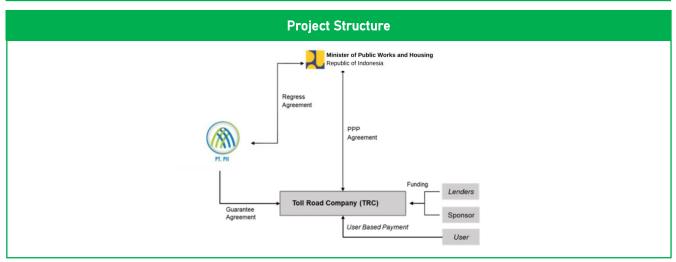
Financial Feasibility:

IRR : 12.11 %

NPV : USD 227.99 Million

Estimated Concession Period: 40 years

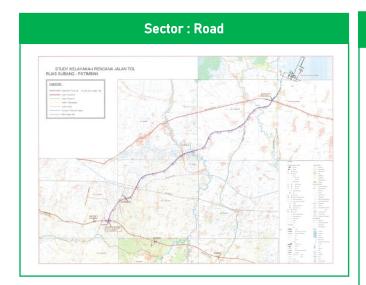




Contact Person : Denny Firmansyah (Head of Investment Division)

Patimban Access Toll Road

Location: West Java Province



Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The New Patimban Port development plan is to provide accessibility that facilitates direct access to and from Patimban Port. The port is planned to be connected with industrial zones, economic zones, urban areas, and the surrounding rural areas. Patimban access toll road will connect Patimban Port with Cikopo - Palimanan Toll Road Section. This toll road will be 37.05 km long with 4 interchanges and 1 junction.

Estimated Project Cost: USD 572.97 Million

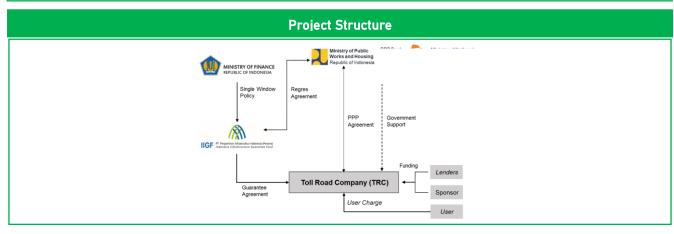
Financial Feasibility:

IRR : 11.40%

NPV : USD 17.92 Million

Concession Period: 50 years

Project Schedule Request for Proposal Q2 2021 Project Status: Agreement Signing Request for Proposal Q3 2022 Request for Q3 2023 Request for Q4 2023



Contact Person

: Denny Firmansyah (Head of Investment Division)

Cikunir - Ulujami Jakarta Outer Ring Road (JORR) Elevated Toll Road

Location: DKI Jakarta and West Java Provinces



Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector : Toll Road

Description:

The project is to construct ± 21.5 km of The Cikunir-Ulujami Jakarta Outer Ring Road (JORR) Elevated Toll Road with PPP scheme. The starting point is located at Ulujami Junction and the end point is located at Jati Asih Junction.

Estimated Project Cost: USD 1,457.12 Million

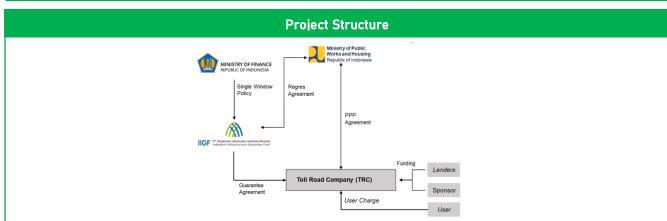
Financial Feasibility:

FIRR : 12.54 %

NPV: USD 533.69 Million

Concession Period: 45 years





Contact Person: Denny Firmansyah (Head of Investment Division) +6221 - 7258063

bpjt@pu.go.id

South Sentul - West Karawang Toll Road

Location: West Java Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project is to construct ± 61.5 km of The South Sentul – West Karawang Toll Road which connect Sentul Junction and Karawang Junction. At the South Sentul – West Karawang Toll Road there are 3 junctions that connect to the Bogor Ring Road Toll Road, the Jakarta – South Cikampek Toll Road, and the existing Jakarta – Cikampek Toll Road.

Estimated Project Cost: USD 1,038.88 Million

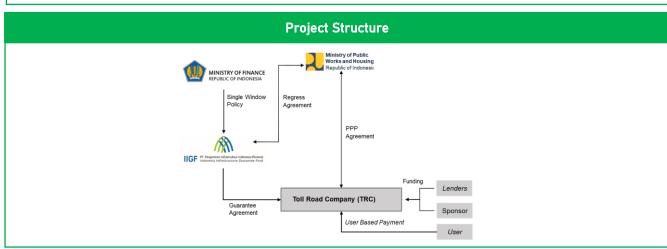
Financial Feasibility:

FIRR : 12.08%

NPV : USD 105.16 Million

Estimated Concession Period: 40 years





Contact Person : Denny Firmansyah (Head of Investment Division)

Bogor - Serpong (Via Parung) Toll Road

Location: West Java Province and Banten Provinces



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project is to construct ±31.117 km of Bogor-Serpong toll road which is expected to overcome traffic problems and encourage economic and regional growth. This toll road is equipped with five interchanges and two junctions.

Estimated Project Cost: USD 797.14 Million

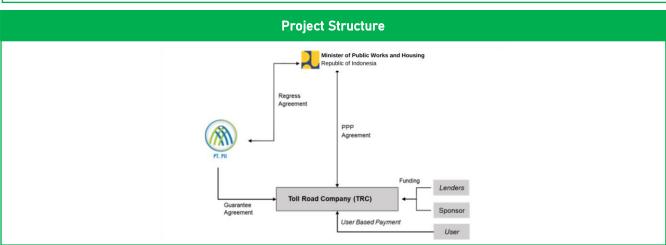
Financial Feasibility:

FIRR : 12.38%

NPV : USD 79.13 Million

Estimated Concession Period: 40 years





Contact Person

: Denny Firmansyah (Head of Investment Division)

Kamal - Teluk Naga - Rajeg Toll Road

Location: DKI Jakarta and Banten Provinces



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

38.6 km Kamal-Teluknaga-Rajeg Toll Road is located in North Jakarta (DKI Jakarta Province) and Tangerang Regency (Banten Province). This toll road is planned as part of the toll road network system in the Jabodetabek (Jakarta, Bogor, Depok, Tangerang, Bekasi) area and will support Pantura strategic area.

Estimated Project Cost: USD 1,268.18 Million

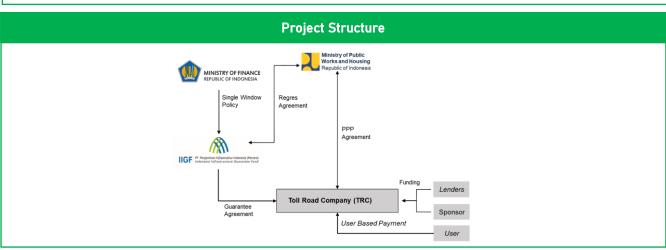
Financial Feasibility:

FIRR : 10.58%

NPV : USD 45.33 Million

Estimated Concession Period: 40 years





Contact Person : Denny Firmansyah (Head of Investment Division)

North Penajam Paser - Balikpapan Toll Road Bridge

Location: East Kalimantan Province



Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Bridge

Description:

The construction of the bridge (which functions as a toll road) will connect the North Penajam Paser Regency with Balikpapan City across the Bay of Balikpapan. The North Penajam Paser - Balikpapan Toll Road Bridge will not only eliminate the geographical obstacle between the North Penajam Paser Regency and the Balikpapan City, but also between East Kalimantan and South Kalimantan Provinces.

Estimated Project Cost: USD 1,049.55 Million

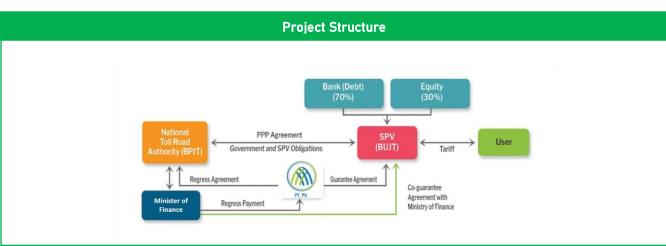
Financial Feasibility:

IRR : 12.61%

NPV: USD 124.35 Million

Estimated Concession Period: 45 years





Contact Person

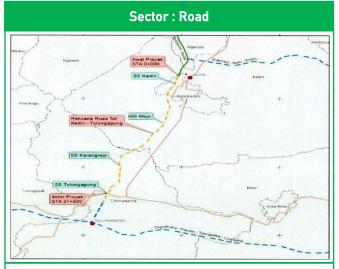
: Denny Firmansyah (Head of Investment Division)

+6221-7258063

bpjt@pu.go.id

Kediri - Tulungagung Toll Road

Location: East Java Province



Government Contracting Agency:

Minister of Public Works and Public Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Toll Road

Description:

The project is to construct a ±44.51 km toll road of Kediri-Tulungagung which is expected to encourage economic and regional growth for the south part of East Java and also become an access road to Kediri Airport. This toll road plan is equipped with 2 junctions and 3 interchanges.

Estimated Project Cost: USD 692.9 Million

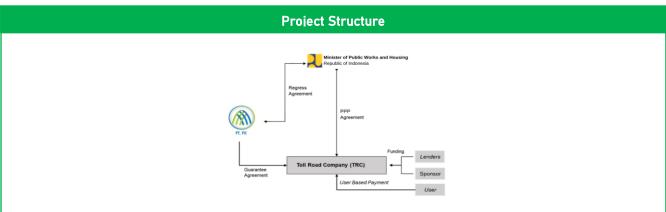
Financial Feasibility:

IRR : 9.69%

NPV : USD 1.66 Million

Concession Period: 50 years





Contact Person : D

: Denny Firmansyah (Head of Investment Division)

Development of The Trans Papua Jayapura - Wamena Road

Location: Papua Province



Government Contracting Agency:

Minister of Public Works and Public Housing

Type of PPP:

Solicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Non-Toll Road

Description:

The Trans Papua Mamberamo – Elelim road section is located in Papua Province which is part of the Trans Papua Road section that connects the Jayapura area with Wamena. The location of the road preservation work starts from the direction of Wamena KM 366+690 with a handling length of 50.14 Km.

Estimated Project Cost: USD 188.02 Million

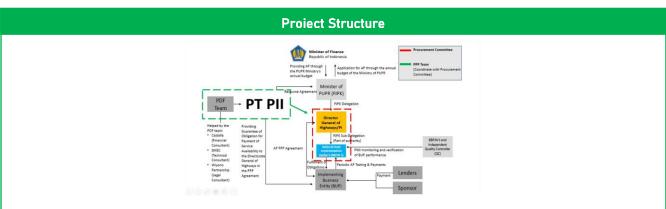
Financial Feasibility:

IRR : 10.81%

NPV : USD 5.72 Million

Concession Period: 15 years





Contact Person : Denny Firmansyah (Head of Investment Division)

Karian - Serpong Regional Water Supply System

Location: Lebak, Banten Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Water Supply

Description:

Karian-Serpong Regional Water Supply System project is developed to accelerate the expansion of piped water supply for DKI Jakarta, Tangerang City, and South Tangerang where the bulk water will be sourced from the Karian Dam in Banten Province through the project Karian Serpong Conveyance System with outflow of 4.600 lpd.

Estimated Project Cost: USD 166.64 Million

Financial Feasibility

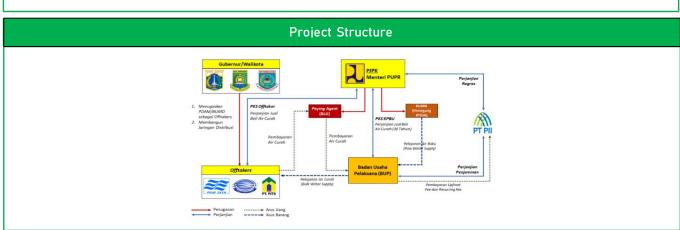
IRR : 10.87%

NPV : USD 49.14 Million

Estimated Concession Period: 33 years (incl.

construction)





Contact Person

: Dahlia Napitupulu (Head of Investment Cooperation Coordination SubdirectorateDirectorate General of Infrastructure Financing for Public Works and Housing)

+62878 - 2391-8110

Legok Nangka Regional Waste Processing Facility

Location: West Java Province



Government Contracting Agency:

Governor of West Java

Type of PPP:

Solicited

Return of Investment:

User Charge

Sub-Sector: Waste Management System

Description:

Management of 1,853 - 2,131 tonnes waste per day of sourced from 6 municipalities (Bandung Regency, Bandung City, Sumedang Regency, Cimahi City, West Bandung Regency, and Garut Regency) located in Legok Nangka, Nagreg, West Java. Scope: Design, Build, Finance, Operate, maintain the Waste Treatment Plant and supporting infrastructure.

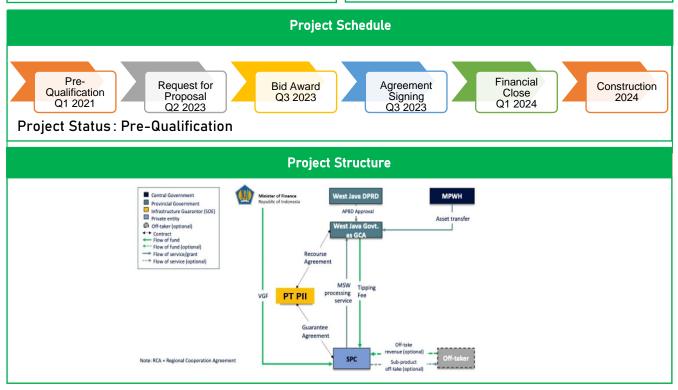
Estimated Project Cost: USD 271.36 Million

Financial Feasibility:

IRR : 13.30%

NPV: USD 48.98 Million

Concession Period: 25 years

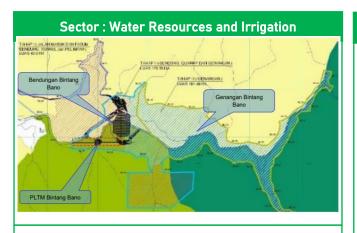


Contact Person : Arief Perdana (Head of West Java Regional Solid Waste Management) +628122147611

pstrdlhprovjabar@gmail.com

Bintang Bano Dam Maintenance and Provision of Mini Hydro Power Plant Infrastructure Capacity 6,3 MW

Location: West Sumbawa, West Nusa Tenggara Province



Government Contracting Agency:

Minister of Public Works and Housing

Type of PPP:

Unsolicited

Return of Investment:

User Charge

Sub-Sector: Mini Hydro Power Plant

Description:

MHPP Bintang Bano is the first Unsolicited Water Resources PPP project using a user charge return on investment scheme. The project scope are provision of Mini Hydro Power Plant Capacity 6,3 MW which implemented under Design-Build-Finance-Operate-Maintenance-Transfer (DBFOMT) scheme and maintenance of Bintang Bano Dam.

Estimated Project Cost: USD 11.23 Million

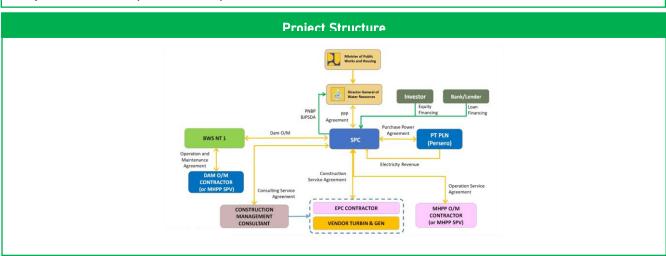
Financial Feasibility:

IRR : 12.50%

NPV: USD 3.87 Million

Estimated Concession Period: 27 years



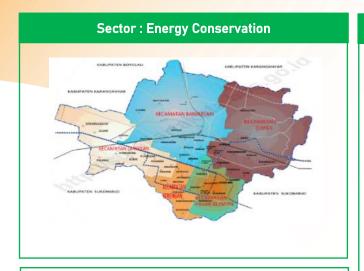


Contact Person

: Arvi Argyantoro (Director for Water Resources Infrastructure Financing) +62-21-7264-267, dit_ppisda@pu.go.id

Surakarta Street Lighting

Location: Surakarta, Central Java Province



Government Contracting Agency:

Mayor of Surakarta

Type of PPP:

Solicited

Return of Investment:

Availability Payment

Sub-Sector: Street Lighting

Description:

The Municipal Government of Surakarta is proposing to revitalize the PSL public services within the city, covering 976 km city road network needs around 31,890 lamp points. The project will be implemented in PPP Scheme. The scheme will include PPP agreement between the Municipal and the Business Entity along the specified concession period that requires the Business Entity to finance, design, develop, operate, and maintain the PSL service.

Estimated Project Cost: USD 25.4 Million

Financial Feasibility:

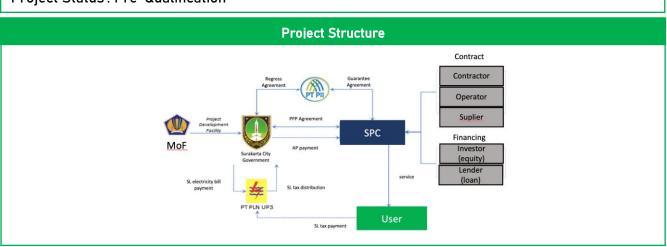
IRR : 15%

NPV : USD 0.88 Million

Estimated Concession Period: 17 years

including 2 years construction





Contact Information : Ir. Ahyani (Secretary of Surakarta City)

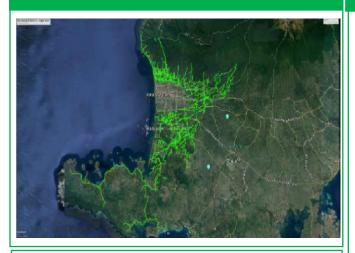
+62-271-662-266

setda@surakarta.go.id; kpbupju.solo@gmail.com

Arrangement and Management of West Lombok Public Street Lighting

Location: West Lombok Regency, West Nusa Tenggara

Sector: Energy Conservation



Government Contracting Agency:

Regent of West Lombok hand over to Asisstant for Economics and Development

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment

Sub-Sector: Street Lighting

Description:

The West Lombok regent has an annual problem in electricity payment due to street lighting. Nevertheless, the amount of street lighting is deemed inadequate.

The West Lombok Regency planned to install and maintain its street lighting using Public Private Partnership. It is hoped that this street project lighting will help increase the economy and public welfare in the regency by ensuring road safety by street lighting during the night.

Estimated Project Cost: USD 62.62 Million

Financial Feasibility:

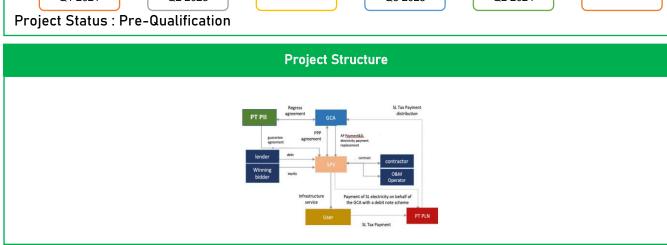
FIRR : 10.07 %

NPV : USD 0.26 Million

Estimated Concession Period: 1 years of

construction and 10 years of O&M

Pre-Qualification Q1 2021 Project Status: Pre-Qualification Request for Proposal Q2 2023 Request for Proposal Q3 2023

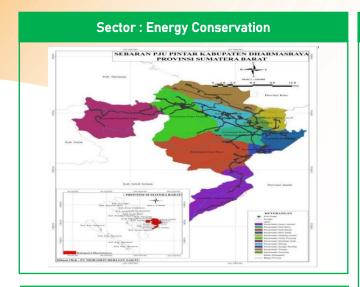


Contact Information : Rusditah, S.Sos (Assistant of Economy and Development of West Lombok Regency)

+62 82341650685

Dharmasraya Street Lighting

Location: Dharmasraya, West Sumatera



Government Contracting Agency:

Regent of Dharmasraya

Type of PPP:

Unsolicited

Return of Investment:

Availability Payment (AP)

Sub-Sector: Street Lighting

Description:

Replacing Mercury type Street Lamps with LEDs with Total of 4.135 in 11 Districts in Dharmasraya. The project scope are design, build, finance, operate, maintain and transfer the Street Lamps.

Estimated Project Cost: USD 3.13 Million

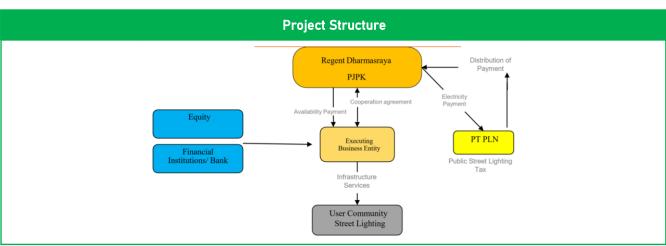
Financial Feasibility:

IRR : 15.37%

NPV : USD 126,635.13

Estimated Concession Period: 6 month construction and 5 years operation.





Contact Person : Drs. Yefrinaldi, MM (Economic and Development Assistant) 08126642167



Summary of Success Story

The following list consists of projects that categorized as success story as of May 2023.

No	Project Name	Description	Status (per May 2023)
1.	Development of Makassar – Parepare Railway	Makassar-Parepare railway development is part of the Trans-Sulawesi railway network. The objectives are: (i) to improve goods and passenger movement in terms of national connectivity and (ii) to achieve the national railway line target of 10,524 km in 2030. The project scopes are infrastructure construction (F Tonasa segment & Garongkong segment), infrastructure operation & maintenance of the B-C-D-F Tonasa Segment.	Success Story (Partially Operated)
2.	Development of Anggrek Port	Anggrek Port as a goods gateway and a regional economic driver needs to be supported by the development of the hinterland area including its accessibility. Trading activities and distribution of foods especially in the North Gorontalo district depend on this port. It is non-commercial port and operated under the Directorate of Sea Transportation of the Ministry of Transportation.	Success Story (Partially Operated)
3.	Proving Ground Motor Vehicle Roadworthiness Testing and Certification Agency (Balai Pengujian Laik Jalan & Sertifikasi Kendaraan Bermotor/ BPLJSKB) Bekasi	This BPLJSKB Proving Ground is planned as a certification and testing facilities for motor vehicles to improve motor vehicle's safety and road worthiness and also to reduce level of emission. It will adopt UNECE standards and it will comprise high speed tracks, brake-testing, noise emission testing, crash test, and other testing facilities.	Success Story (Construction)
4.	Manado – Bitung Toll Road	Manado-Bitung toll road is one of the longest in Northern Sulawesi connecting Manado City to Bitung City, approximately 39.9 km.	Success Story (Operation)
5.	Batang – Semarang Toll Road	Batang-Semarang Toll Road (75 km) is a section of the Trans- Java Toll Road Network that will connect Jakarta and Surabaya. Batang is a regency on the north coast of Central Java Province while Semarang is the largest and the capital city of Central Java Province.	Success Story (Operation)
6.	Pandaan – Malang Toll Road	Pandaan - Malang toll road is designed to improve connectivity in the region. In addition, the toll road is expected to facilitate industrial transportation from Pandaan to Malang which are connected directly to Surabaya, and vice versa.	Success Story (Operation)
7.	Jakarta – Cikampek II Elevated Toll Road (Unsolicited)	The project is a 36.4 km elevated toll road to be built over the existing Jakarta - Cikampek toll road, which is being operated by PT Jasa Marga. The Jakarta-Cikampek road is part of the Trans-Java toll road network connecting Jakarta and Surabaya. The existing road's capacity has already been excedeed, but there are limitations to widening it thus the proposed solution is to expand the road's capacity by building over it.	Success Story (Operation)

No	Project Name	Description	Status (per May 2023)
8.	Krian – Legundi – Bunder – Manyar Toll Road (Unsolicited)	Part of the Trans-Java Toll Road is located in East Java with a length of approximately 38.29 km from Krian to Manyar. One of the attractiveness of this toll road project is the residential areas and commercial areas along the corridor.	Success Story (Operation)
9.	Balikpapan – Samarinda Toll Road	Balikpapan-Samarinda toll road (99 km) will connect the two largest cities in East Kalimantan Province, Balikpapan and Samarinda. This project is divided into two sections, Section 1 consists of Package 1 (25.07 km) and Package 5 (11.09 km) and Section 2 consists of Package 2 (23.26 km), Package 3 (21.90 km), and Package 4 (17.70 km).	Success Story (Partially Operated)
10.	Semarang – Demak Toll Road	The proposed project will connect Semarang (Capital of Central Java Province) and the city of Demak. This Project has a high traffic volume of ±27 km in length. Semarang is the capital city of Central Java Province and is well-developed with industrial goods and trading activities. On the other side, Demak is a region that is rich in natural resources. This project is also integrated with the development of the Semarang Sea Wall.	Success Story (Partially Operated)
11.	Cileunyi – Sumedang – Dawuan Toll Road	The Cileunyi - Sumedang - Dawuan Toll Road project will provide direct access for transporting agricultural and manufactured goods as well as services produced from these areas to the port city of Cirebon. This toll road is urgently required to shift some of the development to the east side of Bandung.	Success Story (Partially Operated)
12.	Serang – Panimbang Toll Road	Serang - Panimbang Toll Road is located in Banten Province where the toll reaches Jakarta to Tanjung Lesung Special Economic Zone. Furthermore, one of the attractive development points of this toll road is that it will have tremendous facilities, such as the development of residential areas and commercial areas along the corridor.	Success Story (Partially Operated)
13.	Probolinggo – Banyuwangi Toll Road	This project is expected to play an integral part of the East Java Road System. It is 171.52 km in length which connected Probolinggo and Banyuwangi, crossing three districts in East Java including Situbondo district. Each district has different potential resources which can be developed further.	Success Story (Construction)
14.	Multi Lane Free Flow (MLFF) Toll Transaction System (Unsolicited)	The project is to establish a new toll collection system, which replaces the existing manual toll collection method. The project scope is Design, Build, Finance, Operate, and Transfer (DBFOT). The proposed system has the technical requirement of MLFF using the Global Navigation Satellite System (GNSS) for toll collection.	Success Story (Construction)
15.	Duplication and/or Replacement of Callender Hamilton Bridges in Java Island Main Road (Unsolicited)	This project is to replace and/or duplicate 37 Location Callender Hamilton Bridges on the Java Island Main Road. The location of the bridges is on the national road connecting the provincial capital and are the main logistics route to Sumatera Island in order to increase national economic activity. The bridges are located in the provinces of Banten, West Java, Central Java, and East Java.	Success Story (Construction)

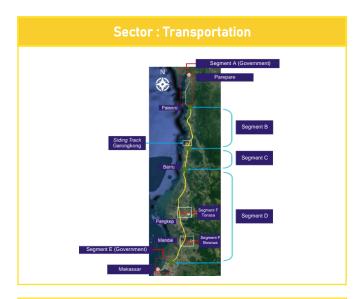
No	Project Name	Description	Status (per May 2023)
16.	Eastern Sumatran Road Preservation in South Sumatra Province	The location of this project is on the East side of South Sumatra Road in Palembang City, namely Srijaya Raya Road, Mayjen Yusuf Singadekane Road, Letjen H. Alamsyah Ratu Perwiranegara Road, Soekarno Hatta Road, Terminal of Alang-alang Lebar Road and Sultan Mahmud Badarudin II Road. The approximate total length of this project will be 29.87 km. Investment return is in form of Availability Payment.	Success Story (Construction)
17.	Serpong – Balaraja Toll Road (Unsolicited)	Serpong-Balaraja Toll (30 km) is part of the Jabodetabek toll road network. This toll road is located in Banten Province and will support rapid development in that area.	Success Story (Construction)
18.	Jakarta – Cikampek II South Toll Road (Unsolicited)	Jakarta - Cikampek II South is a toll extending 36.4 km. Traffic volume through the Jakarta-Cikampek toll road capacity has exceeded the V/C ratio high of 1.51. The Corridor plan of this toll road section is located in the administrative area of the West Java Province, namely: Bekasi City, Bogor Regency, Bekasi Regency, Karawang Regency, and Purwakarta Regency.	Success Story (Construction)
19.	Yogyakarta - Bawen Toll Road	Yogya-Bawen toll road will connect Semarang-Solo toll road to Yogyakarta. It is planned to reduce heavy traffic on the arterial road. It will also support the industrial area in Ungaran-Bawen corridor and Joglosemar (Yogyakarta-Solo-Semarang) tourism area. Furthermore, this project is included in the Indonesia National Strategic Project (PSN).	Success Story (Construction)
20.	Solo - Yogyakarta - Kulonprogo (NYIA) Toll Road (Unsolicited)	The development of Solo-Yogyakarta-Kulon Progo (New Yogyakarta International Airport/NYIA) Toll Road is part of the Southern Java Road Network, stretching from Gede Bage in West Java province to Solo in Central Java. The toll road will run for 96.57 km, divided into three sections: Kartasura-Purwomartani, Purwomartani-Gamping, and Gamping-Kulon Progo (NYIA).	Success Story (Construction)
21.	Preservation of Eastern Sumatera National Road in Riau Province	One of the Eastern Sumatra Roads in the Province starting from the Kayu Ara Intersection (Pekanbaru City) to Lago Intersection (Pelalawan Regency) consists of three streets that could be categorized as a National Road which is correlated towards the national economic growth. The approximate total length of this project will be 43 km. Investment return is in form of Availability Payment.	Success Story (Construction)
22.	Gilimanuk – Mengwi Toll Road (Unsolicited)	The project is to construct ± 96,84 km of The Gilimanuk-Mengwi toll road with PPP scheme. The starting point located in Gilimanuk-Jembrana District and the end point is located in Mengwi-Badung District.	Success Story (Construction)
23	West Semarang Water Supply System	West Semarang Water Supply project is built with a capacity of 1,000 liters per second. The service area is planned to serve three (3) subdistricts divided into five (5) service zones.	Success Story (Operation)

No	Project Name	Description	Status (per May 2023)
24.	Development of Bandar Lampung Water Supply System	The Project scope includes the financing, construction, operation and maintenance of water supply systems, covering raw water intake with the capacity of 825 lps; water treatment plant with a production capacity of 750 lps; ±22 km of Ø 1,000 mm water transmission pipeline; reservoir with a capacity of ±10,000 m3; and the development of parts of distribution network with pumping system (primary and secondary distribution network).	Success Story (Operation)
25.	Development of Umbulan Water Supply System	The Umbulan Water Supply Project aims to increase the water supply capacity to meet the demand in the East Java Province. The capacity of the drinking water is 4,000 lps at Pasuruan Regency, Pasuruan City, Sidoarjo Regency, Surabaya City, Gresik Regency, and PTAB (Industrial Area) connecting approximately 320,000 households.	Success Story (Partially Operated)
26.	Development of Pekanbaru Water Supply System	The purpose of the Pekanbaru Drinking Water Supply System is to provide reliable drinking water infrastructure and increase economic activities in Pekanbaru City. The Main Project Scope is to Rehabilitation Uprating Existing Water Treatment Plants (WTP) into 500 l/s, Construction of New Water Treatment Facility of 250 l/s, and construct of pipe distribution network until 162 km. The total Capacity of this Project is 750 l/s and will Coverage of 61.000 House connections for 7 districts in Pekanbaru City.	Success Story (Partially Operated)
27.	Development of Jatiluhur I Regional Water Supply System (Unsolicited)	Jatiluhur I Regional Water Supply system has an outflow of 4,750 lps that will supply Karawang Regency, Bekasi Regency, Bekasi City, and DKI Jakarta. The project covers the construction of intake, transmission pipeline, water treatment plant (WTP), and the development of the main distribution unit.	Success Story (Construction)
28.	Nambo Regional Waste Management System	The capacity of Nambo waste processing technology is 1,650-1,800 tonnes/day. Targeted facility is to produce some recycled products such as compost, refused derived fuel (RDF) and other recyclable materials.	Success Story (Construction)
29.	Construction of Palapa Ring West Package	Development of fiber optic-based broadband telecommunication network which will connect Riau Province, Riau Islands, and the Natuna Island with a total length of 2,123 km.	Success Story (Operation)
30.	Construction of Palapa Ring Central Package	Development of fiber optic-based broadband telecommunication network covering 17 regencies across Kalimantan, Sulawesi, and Maluku with a total length of 3,103 km.	Success Story (Operation)
31.	Construction of Palapa Ring East Package	Development of fiber optic-based broadband telecommunication network covering 35 regencies across East Nusa Tenggara, Maluku, West Papua, and remote areas in Papua with a total length of 7,002 km.	Success Story (Operation)

No	Project Name	Description	Status (per May 2023)
32.	Central Java Power Plant	This project is the development of a coal-fired power plant in Batang Regency, Central Java with a capacity of 2x1,000 MW. It is considered the largest PPP electricity project by capacity in Asia.	Success Story (Operation)
33.	Development of Multifunction Satellite	The Multifunction Satellite Project, known as Satellite of Republic Indonesia (Satria). The satellite, designed to have a throughput capacity of 150 billion bits per second (Gbps), is expected to provide internet services to 150,000 public facilities, including schools and health centers, as well as defense establishments, security administrations, and all regional government offices all over Indonesia.	Success Story (Construction)
34.	Madiun Street Lighting	Provide convenience and public services to the community by providing ideal APJ conditions and it is expected to grow a new economic center in Madiun district from all sectors. Development of new APJ with a total of 7,459 APJ points spread across 15 Districts.	Success Story (Construction)

Development of Makassar - Parepare Railway

Location: South Sulawesi Province



Project Status:

Project is partially operational

Government Contracting Agency:

Minister of Transportation

Implementing Business Entity:

PT Celebes Railway Indonesia

Financier:

- PT Indonesia Infrastructure Finance
- PT Sarana Multi Infrastruktur (Persero), and
- PT Bank Syariah Indonesia (Tbk)

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Financial Close : 2021

Operation : October 2022 (1st COD)
Opeartion : May 2023 (2nd COD)

Sub-Sector: Railway

Description:

Makassar-Parepare railway development is part of the Trans-Sulawesi railway network. The objectives are: (i) to improve goods and passenger movement in terms of national connectivity and (ii) to achieve the national railway line target of 10,524 km in 2030. The project scopes are infrastructure construction (F Tonasa segment & Garongkong segment), infrastructure operation & maintenance of the B-C-D-F Tonasa Segment.

Estimated Project Cost: USD 138.58 Million

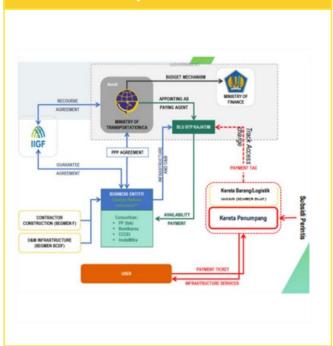
Financial Feasibility:

IRR : 11,76%

NPV : USD 3.46 Million

Concession Period: 17 years

Project Structure



Contact Person : Ir. Mohammad Risal Wasal, A.TD., M.M., IPM (Director General of

Railways) Merdeka Barat Street No 8, Karsa Building 2th Floor,

Central Jakarta, email: djka151@dephub.go.id

Development of Anggrek Port

Location: Gorontalo Province

Sector: Telecommunication and informatics



Project Status:

Project is partially operational

Government Contracting Agency:

Minister of Transportation hand over to Director General of Sea Transportation

Investor:

PT Anggrek Gorontalo Internasional Terminal (AGIT)

Financier:

PT BNI (Persero)

Indonesia Infrastructure Fianance (IIF)

Government Guarantee:

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Implementation Schedule:

Construction: Q2 2023

Sub-Sector: Telecommunication Network

Description:

Anggrek Port as a goods gateway and a regional economic driver needs to be supported by the development of the hinterland area including its accessibility. Trading activities and distribution of foods especially in the North Gorontalo district depend on this port. It is non-commercial port and operated under the Directorate of Sea Transportation of the Ministry of Transportation.

Estimated Project Cost: USD 98.14 Million

Financial Feasibility:

IRR : 11.8 %

NPV : USD 4.74 Million

Concession Period: 30 years

Minister of Transportation delegation of authority Pec of Corperation Page Agreement Concession Regres Agreement Procurement Contract Contract User Service Provision Financing

Contact Person : Muhammad Masyhud

Head of Port Development Planning Sub- Directorate of Port

kpbu_pelabuhan@dephub.go.id

Proving Ground Motor Vehicle Roadworthiness Testing And Certification

Location: Bekasi, West Java Province

Sector: Transportation



Project Status:

Project is currently Under Construction

Government Contracting Agency:

Minister of Transportation hand over to Director General of Land Transportation

Investor:

PT Indonesia International Automotive Proving Ground (IIAPG)

Financier:

Mitsubishi UFJ Financial Group (MUFG) JBIC

Government Guarantee:

Government Guarantee From IIGF (PT PII)

Implementation Schedule:

Construction Q2 2023

Sub-Sector: Vehicle Testing Facility

Description:

This BPLJSKB Proving Ground is planned as a certification and testing facilities for motor vehicles to improve motor vehicle's safety and road worthiness and also to reduce level of emission. It will adopts UNECE standards and it will comprise high speed tracks, braketesting, noise emission testing, crash test, and other testing facilities.

Estimated Project Cost: USD 121.28 Million

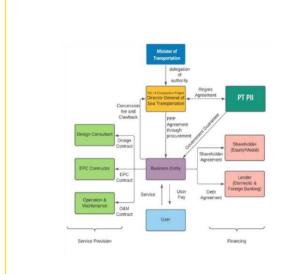
Financial Feasibility:

IRR : 11%

Concession Period:

2 years construction + 15 years operation *) IRR=WACC

Project Structure



Contact Person : Susanty Pertiwi (Head of Infrastructure and Business Sub

directorate)

+62-852-8006-5003, s.pertiwi74@gmail.com

Manado - Bitung Toll Road

Location: North Sulawesi Province



Project Status:

Project is partially operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Manado Bitung

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT Wijaya Karya (Persero) Tbk;
- 3. PT Pembangunan Perumahan (Persero) Tbk.

Financier:

Refinance BNI, BCA, Bank Mandiri and PT SMI

Government Support & Guarantee:

Land acquisition risk
 Tariff adjustment risk
 Political risk
 Land fund Risk
 Ramp up risk
 Termination risk

Implementation Schedule:

Preparation : 2015
 Land Acquisition : 2016 - 2017
 Construction : 2017 - 2019
 Operation : 2019

Description:

Manado-Bitung toll road is one of the longest in Northern Sulawesi connecting Manado City to Bitung City, approximately 39.9 km.

Estimated Project Cost: USD 383.96 Million

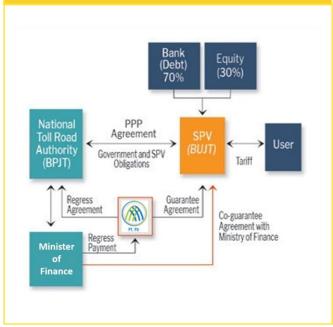
Financial Feasibility:

IRR : 12.23%

NPV: USD 13.51 Million

Concession Period: 40 years

Project Structure

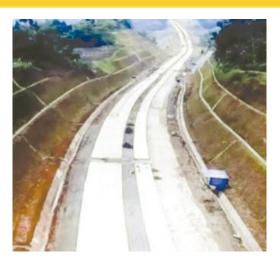


Contact Person : Denny Firmansyah (Head of Investment Division)

Batang - Semarang Toll Road

Location: Central Java Province





Project Status:

Project is currently operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Semarang-Batang

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT Waskita Toll Road.

Financier:

Financial close through Contractor Pre-Financing (CPF)

Indicative Government Support & Guarantee:

- Land acquisition risk Land fund risk
- Tariff adjustment risk
- Political risk

Contact Person

Implementation Schedule:

Preparation : 2016
 Land Acquisition : 2016

3. Construction : 2016 - 2018

4. Operation : 2019

. 2017

+6221-7258063 bpjt@pu.go.id Sub-Sector: Toll Road

Description:

Batang-Semarang Toll Road (75 km) is a section of the Trans-Java Toll Road Network that will connect Jakarta and Surabaya. Batang is a regency on the north coast of Central Java Province while Semarang is the largest and the capital city of Central Java Province.

Estimated Project Cost: USD 824.16 Million

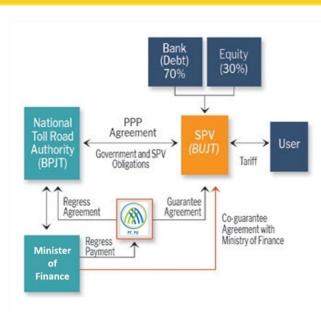
Financial Feasibility:

IRR : 13.70%

NPV: USD 226.89 Million

Concession Period: 45 years

Project Structure



: Denny Firmansyah (Head of Investment Division)

Pandaan - Malang Toll Road

Location: East Java Province





Project Status:

Project is currently operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Pandaan Malang

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT PP (Persero) Tbk;
- 3. PT Sarana Multi Infrastruktur (Persero).

Financier:

Refinancing with syndication of BNI, BCA, and Bank Mandiri

Government Support & Guarantee:

- Land acquisition risk - Land fund Risk - Tariff adjustment risk - Ramp up risk - Termination risk - Political risk

Implementation Schedule:

1. Preparation : 2015 2. Land Acquisition : 2016 - 2017 3. Construction : 2017 - 2019 : 2019

4. Operation

Sub-Sector: Toll Road

Description:

Pandaan - Malang toll road is designed to improve connectivity in the region. In addition, the toll road is expected to facilitate industrial transportation from Pandaan to Malang which are connected directly to Surabaya, and vice versa.

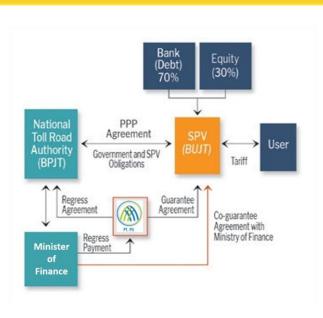
Estimated Project Cost: USD 433.35 Million

Financial Feasibility:

: 13.81% IRR

: USD 97.66 Million NPV

Concession Period: 35 years



: Denny Firmansyah (Head of Investment Division) Contact Person

Jakarta - Cikampek II Elevated Toll Road

Location: Jakarta and West Java Province





Project Status:

Project is currently operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Jalan Layang Cikampek

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT Ranggi Sugiron Perkasa.

Financier:

Syndication of bank on investment credit

Government Support & Guarantee:

- Tariff adjustment risk
- Political risk
- Termination Risk

Implementation Schedule:

Preparation : 2015
 Land Acquisition : 2016

3. Construction : 2017 - 20194. Operation : 2019

Sub-Sector: Toll Road

Description:

The project is a 36.4 km elevated toll road to be built over the existing Jakarta - Cikampek toll road, which is being operated by PT Jasa Marga. The Jakarta-Cikampek road is part of the Trans-Java toll road network connecting Jakarta and Surabaya. The existing road's capacity has already been excedeed, but there are limitations to widening it thus the proposed solution is to expand the road's capacity by building over it.

Estimated Project Cost: USD 1.121,02 Million

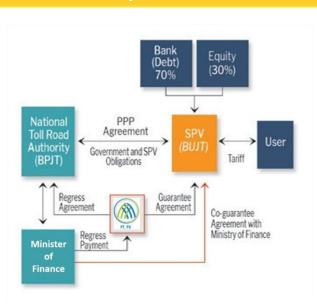
Financial Feasibility:

IRR : 12.66%

NPV : USD 102.59 Million

Concession Period: 45 years

Project Structure



Contact Person : Denny Firmansyah (Head of Investment Division)

Krian - Legundi - Bunder - Manyar Toll Road

Location: East Java Province





Project Status:

Project is currently operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Waskita Bumi Wira

- 1. PT Waskita Toll Road;
- 2. PT Panca Wira Usaha Jawa Timur

Financier:

Financial close through Contractor Pre-Financing (CPF)

Government Support & Guarantee:

- Project auhorization risk Payment Risk
- Construction risk

Implementation Schedule:

Preparation : 2015
 Land Acquisition : 2016
 Construction : 2016 - 2019
 Operation : 2020

Sub-Sector: Toll Road

Description:

Part of the Trans-Java Toll Road is located in East Java with a length of approximately 38.29 km from Krian to Manyar. One of the attractiveness of this toll road project is the residential areas and commercial areas along the corridor.

Estimated Project Cost: USD 911.42 Million

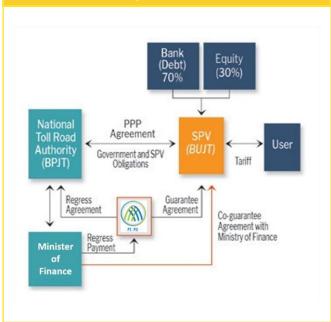
Financial Feasibility:

IRR : 14.59%

NPV: USD 283.12 Million

Concession Period: 45 years

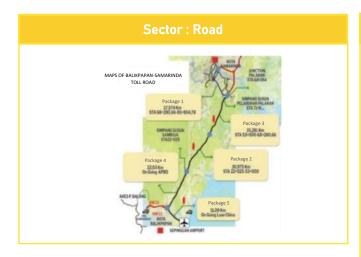
Project Structure



Contact Person : Denny Firmansyah (Head of Investment Division)

Balikpapan - Samarinda Toll Road

Location: East Kalimantan Province



Project Status:

Project is partially operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Balikpapan-Samarinda

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT Wijaya Karya (Persero) Tbk;
- 3. PT Pembangunan Perumahan (Persero)
 Thk.
- 4. PT Bangun Tjipta Sarana.

Financier:

Financial close through Contractor Pre-Financing (CPF)

Indicative Government Support & Guarantee:

Land acquisition riskTariff adjustment riskRamp up period

- Political risk - Termination risk

Implementation Schedule:

Preparation : 2015
 Land Acquisition : 2016

3. Construction : 2016 - 2019

4. Operation : 2019

Contact Person : Denny Firmansyah (Head of Investment Division)

+6221-7258063 bpjt@pu.go.id

Sub-Sector: Toll Road

Description:

Balikpapan-Samarinda toll road (99 km) will connect the two largest cities in East Kalimantan Province, Balikpapan and Samarinda. This project is divided into two sections, Section 1 consists of Package 1 (25.07 km) and Package 5 (11.09 km) and Section 2 consists of Package 2 (23.26 km), Package 3 (21.90 km), and Package 4 (17.70 km).

Estimated Project Cost: USD 473.68 Million

Financial Feasibility:

IRR : 13.87%

NPV: USD 256.49 Million

Concession Period: 40 years

Equity (Debt) (30%)PPP National Agreement Authority Government and SPV Obligations Tariff (BPJT) Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Regress Minister **Finance**

Semarang - Demak Toll Road

Location: Central Java Province





Project Status:

Project is partially operational.

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT PP Semarang-Demak

- 1. PT Pembangunan Perumahan (Persero) Tbk;
- 2. PT Wijaya Karya (Persero) Tbk;

Financier:

Financial close through Contractor Pre-Financing (CPF)

Indicative Government Support & Guarantee:

- Land acquisition risk - Land fund risk - Tariff adjustment risk - Ramp up period - Political risk - Termination risk
- Implementation Schedule:

1. Preparation : 2018 2. Land Acquisition : 2019 - 2021

3. Construction

Section 1 (Gov. Support) = Semarang -Sayung (Q4 2024)

Section 2 = Sayung - Demak (Q2 2022)

4. Operation : 2023

Description:

The proposed project will connect Semarang (Capital of Central Java Province) and the city of Demak. This Project has a high traffic volume of ±27 km in length. Semarang is the capital city of Central Java Province and is well-developed with industrial goods and trading activities. On the other side. Demak is a region that is rich in natural resources. This project is also integrated with the development of the Semarang Sea Wall.

Estimated Project Cost: USD 166.54 Million

Financial Feasibility:

IRR : 11,56% (with government support)

NPV : USD 90.60 Million

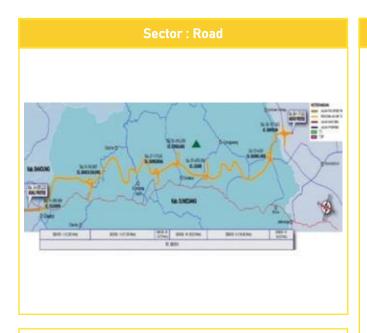
Concession Period: 35 years

Equity (Debt) (30%) ppp National Agreement Toll Road User Government and SPV Obligations Tariff (BPJT) Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Regress Minister

Contact Person : Denny Firmansyah (Head of Investment Division)

Cileunyi - Sumedang - Dawuan Toll Road

Location: West Java Province



Project Status:

Project is partially operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Citra Karya Jabar Tol

- 1. PT Citra Marga Nusaphala Persada Tbk;
- 2. PT Waskita Toll Road;
- 3. PT Pembanguan Perumahan (Persero);
- 4. PT Jasa Sarana.

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Preparation : 2017

Land Acquisition : 2017 - 2019
 Construction : 2017 - 2021
 Operation : 2021

Sub-Sector: Toll Road

Description:

The Cileunyi - Sumedang - Dawuan Toll Road project will provide direct access for transporting agricultural and manufactured goods as well as services produced from these areas to the port city of Cirebon. This toll road is urgently required to shift some of the development to the east side of Bandung.

Estimated Project Cost: USD 599.11 Million

Financial Feasibility:

IRR : 13.11%

NPV: USD 17.66 Million

Concession Period: 40 years

Equity (Debt) (30%)70% PPP National Agreement Toll Road User Authority Government and SPV (BPJT) **Obligations** Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Regress Minister

Contact Person : Denny Firmansyah (Head of Investment Division)

Serang - Panimbang Toll Road

Location: Banten Province



Project Status:

Project is partially operational

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Wijaya Karya Serang Panimbang

- 1. PT Wijaya Karya (Persero);
- 2. PT PP (Persero) Tbk;
- 3. PT Jababeka Infrastruktur.

Financier:

Contractor Pre-Financing (PT WIKA & PT PP)

Government Support & Guarantee:

- Government Guarantee from IIGF (PT PII)
- Government support (in kind)

Implementation Schedule:

Preparation : 2016
 Land Acquisition : 2017
 Construction : 2019

4. Operation : 2021 and 2023

Sub-Sector: Toll Road

Description:

Serang - Panimbang Toll Road is located in Banten Province where the toll reaches Jakarta to Tanjung Lesung Special Economic Zone. Furthermore, one of the attractive development points of this toll road is that it will have tremendous facilities, such as the development of residential areas and commercial areas along the corridor.

Estimated Project Cost: USD 386.31 Million

Financial Feasibility:

IRR : 13.96%

NPV : USD 38.57 Million

Concession Period: 40 years

PPP Agreement Agreement Regress Agreement Regress Agreement Regress Payment Of Finance Regress Payment Regress Payment

Contact Person : Denny Firmansyah (Head of Investment Division)

Probolinggo - Banyuwangi Toll Road

Location: East Java Province



Project Status:

Project is under construction

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor

PT Jasamarga Probolinggo Banyuwangi

- 1. PT Jasa Marga (Persero) Tbk
- 2. PT JAwamarga Transjawa Tol
- 3. PT Daya Mulia Turangga
- 4. PT Brantas Abipraya

Financier:

Financial close through Contractor Pre-Financing (CPF)

Indicative Government Support & Guarantee:

- Land acquisition risk
- Land fund risk
- Tariff adjustment risk
- Ramp up period
- Political risk
- Termination risk

Implementation Schedule:

- 1. Preparation: 2015
- 2. Land Acquisition
 - Section 1 Probolinggo Paiton (Q4 2018 Q3 2022)
 - Section 2.1 Paiton Besuki (Q3 2019 Q3 2022)
 - Section 2.2 Besuki Bajulmati (Q3 2019 Q4 2023)
 - Section 3 Bajulmati Ketapang (Q1 2020 Q4 2024)

3. Construction :

- Section 1 Probolinggo Paiton (Q4 2021 Q3 2023)
- Section 2.1 Paiton Besuki (Q1 2022 Q4 2023)
- Section 2.2 Besuki Bajulmati (Q1 2023 Q3 2025)
- Section 3 Bajulmati Ketapang (Q1 2024 Q3 2025)

4. Operation

- Section 1 Probolinggo Paiton (Q1 2024)
- Section 2.1 Paiton Besuki (Q2 2024)
- Section 2.2 Besuki Bajulmati (Q1 2025)
- Section 3 Bajulmati Ketapang (Q1 2026)

Sub-Sector: Toll Road

Description:

This project is expected to play an integral part of the East Java Road System. It is 171.52 km in length which connected Probolinggo and Banyuwangi, crossing three districts in East Java including Situbondo district. Each district has different potential resources which can be developed further.

Estimated Project Cost: USD 1,553.43 Million

Financial Feasibility:

IRR : 11.17%

NPV: USD 244.88 Million

Concession Period: 40 years

Bank (Debt) (30%)70% National Agreement Toll Road Authority Government and SPV (BPJT) **Obligations** Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Minister Payment **Finance**

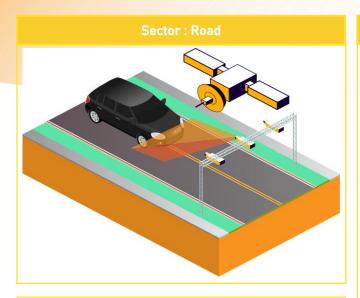
Contact Person : Denny Firmansyah (Head of Investment Division)

+6221-7258063

bpjt@pu.go.id or investasi.bpjt@gmail.com

Multi Lane Free Flow (MLFF) Toll Transaction System

Location: National



Project Status:

Project is currently under construction

Government Contracting Agency:

National Toll Road Authority (BPJT)

Investor:

PT Roatex Indonesia Toll System (Indonesia)

Financier:

Roatex Ltd. Zrt. (Hungary)

Government Support & Guarantee:

_

Implementation Schedule:

Starting Transition Period : Dec 2022
 Full Implementation MLFF : Dec 2023

Sub-Sector: Non-Toll Road

Description:

The project is to establish a new toll collection system, which replaces the existing manual toll collection method. The project scope is Design, Build, Finance, Operate, and Transfer (DBFOT). The proposed system has the technical requirement of MLFF using the Global Navigation Satellite System (GNSS) for toll collection.

Estimated Project Cost: USD 297.30 Million

Financial Feasibility:

IRR : 12.5 % NPV : USD 0*

*) assuming IRR = MARR

Concession Period: 9 years since COD

Contact Person : Ali Rachmadi

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bpjt.umum@pu.go.id

Duplication and/or Replacement of Callender Hamilton Bridges in Java Island Main Road

Location: Java Region

Sector : Road



Project Status:

Project is currently under construction

Government Contracting Agency:

Minister of Public Works and Housing

Investor:

PT Baja Titian Utama

Financier:

PT Bank Mandiri (Persero) Tbk.

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : 2019
 Land Acquisition : 2020

Construction : 2021 – 2023
 Operation : 2024 – 2033

Sub-Sector : Non-Toll Bridge

Description:

This project is to replace and/or duplicate 37 Location Callender Hamilton Bridges on the Java Island Main Road. The location of the bridges is on the national road connecting the provincial capital and are the main logistics route to Sumatera Island in order to increase national economic activity. The bridges are located in the provinces of Banten, West Java, Central Java, and East Java.

Estimated Project Cost: USD 159.13 Million

Financial Feasibility:

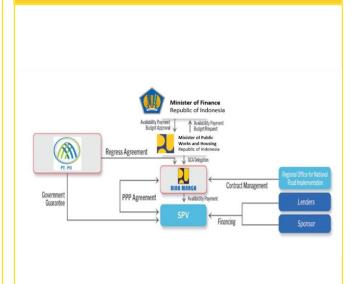
IRR : 11.99 %

NPV: USD 9.97 Million

Concession Period:

12 years (2 years construction + 10 years operation)

Proiect Structure

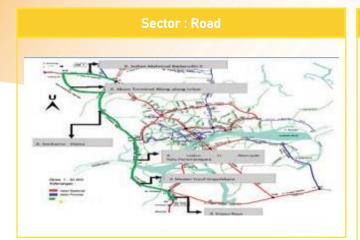


Contact Person : Ira Ariani Chaerunisa (Head of Investment Approval Sub-Directorate)

+6221 - 7264375 direktorat.ppijj@pu.go.id

Eastern Sumatran Road Preservation in South Sumatra Province

Location: South Sumatra Province



Project Status:

Project is currently under construction

Government Contracting Agency:

Director General of Highways, Ministry of Public Works and Housing

Investor:

PT Jalintim Adhi Abipraya

- 1. PT Adhi Karya (Persero) Tbk;
- 2. PT Brantas Abipraya (Persero) Tbk;

Financier:

- 1. Bank Syariah Indonesia
- 2. PT Sarana Multi Infrastruktur (Persero)
- 3. PT Bank Panin Dubai Syariah

Indicative Government Support & Guarantee:

- Change of law - Force majeure

- Additional work - Government Policies

- Delay of sevice (AP) payment

Implementation Schedule:

Preparation : 2017
 Land Acquisition : 2020
 Construction : 2021 - 2023

4. Operation : 2024 - 2035

Sub-Sector: Non-Toll Road

Description:

The location of this project is on the East side of South Sumatra Road in Palembang City, namely Srijaya Raya Road, Mayjen Yusuf Singadekane Road, Letjen H. Alamsyah Ratu Perwiranegara Road, Soekarno Hatta Road, Terminal of Alang-alang Lebar Road and Sultan Mahmud Badarudin II Road. The approximate total length of this project will be 29.87 km. Investment return is in form of Availability Payment.

Estimated Project Cost: USD 61.92 Million

Financial Feasibility:

IRR : 9.85%

NPV : USD 9.12 Million

Concession Period:

15 years (3 years construction + 12 years operation)

Minister of Finance Republic of Indonesia Anability Premet Budget Aproved Regress Agreement Regress Agreement Regress Agreement Anability Premet Anability Premet Regress Agreement Regress Agreement Regress Agreement Regress Agreement Finance Republic of Indonesia Regress Agreement Regress Agreemen

Contact Person : Ir. Pantja Dharma Oetojo, M.Eng.Sc

Deputy Director of Integreted System for Roads and Bridges Network

+ 62-811238264; subdirektoratksjj @gmail.com

Serpong-Balaraja Toll Road

Location: Banten Province

Sector: Road



Project Status:

Project is currently under construction

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Trans Bumi Serbaraja

- 1. PT Bumi Serpong Damai;
- 2. PT Astratel Nusantara;
- 3. PT Transindo Karya Investama;
- 4. PT Sinar Usaha Mahitala.

Financier:

Syndication between PT Bank Mandiri, PT Bank BNI and PT SMI

Government Support & Guarantee:

- Land agcuisition risk Political risk
- Tariff adjustment risk

Implementation Schedule:

Preparation : 2015
 Land Acquisition : 2016

3. Construction : 2016 - 2023

4. Operation : 2024

Contact Person : Denny Firmansyah (Head of Investment Division)

+6221-7258063 bpjt@pu.go.id

Sub-Sector: Toll Road

Description:

Serpong-Balaraja Toll (30 km) is part of the Jabodetabek toll road network. This toll road is located in Banten Province and will support rapid development in that area.

Estimated Project Cost: USD 499.89 Million

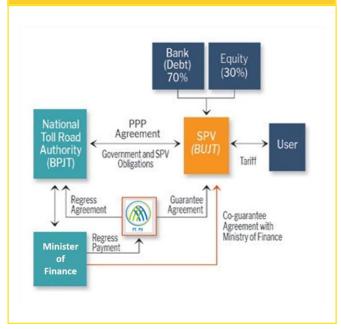
Financial Feasibility:

IRR : 15.89%

NPV: USD 227.88 Million

Concession Period: 40 years

Project Structure



Jakarta - Cikampek II South Toll Road

Location: Jakarta and West Java Province

Sector: Road



Project Status:

Project is currently under construction

Government Contracting Agency:

Head of BPJT (Indonesia Toll Road Authority)

Investor:

PT Jasamarga Japek Selatan

- 1. PT Jasa Marga (Persero) Tbk;
- 2. PT Wiranusantara Bumi

Financier:

Refinancing with syndication of BNI, BCA, and Bank Mandiri

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Preparation : 2017

Land Acquisition : 2018 - 2019
 Construction : 2018 - 2023
 Operation : 2023 and 2024

Sub-Sector: Toll Road

Description:

Jakarta - Cikampek II South is a toll extending 36.4 km. Traffic volume through the Jakarta-Cikampek toll road capacity has exceeded the V/C ratio high of 1.51. The Corridor plan of this toll road section is located in the administrative area of the West Java Province, namely: Bekasi City, Bogor Regency, Bekasi Regency, Karawang Regency, and Purwakarta Regency.

Estimated Project Cost: USD 1,695.57 Million

Financial Feasibility:

IRR : 11.17%

NPV : USD 45.28 Million

Concession Period: 35 years

Equity (Debt) (30%) ppp National Agreement Toll Road Government and SPV Obligations Tariff (BPJT) Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Regress Minister

Contact Person : Denny Firmansyah (Head of Investment Division)

Yogyakarta - Bawen Toll Road

Location: Yogyakarta & Central Java Provinces



Project Status:

Project is currently under construction

Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Investor:

PT Jasamarga Jogja Bawen

- 1. PT Jasa Marga (Persero) Tbk
- 2. PT Adhi Karya (Persero) Tbk
- 3. PT Pembangunan Perumahan (Persero) Tbk
- 4. PT Waskita Karya (Persero) Tbk
- 5. PT Brantas Abipraya (Persero)

Financier:

Financial Close: deadline 17 Sept 2022

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Land Acquisition : 2019 - 2021

2. Construction

 Section 1 (Gov. Support) = Semarang – Sayung (Q4 2024)

Section 2 = Sayung - Demak (Q2 2022)

3. Operation : 2024

Sub-Sector : Toll Road

Description:

Yogya-Bawen toll road will connect Semarang-Solo toll road to Yogyakarta. It is planned to reduce heavy traffic on the arterial road. It will also support the industrial area in Ungaran-Bawen corridor and Joglosemar (Yogyakarta-Solo-Semarang) tourism area. Furthermore, this project is included in the Indonesia National Strategic Project (PSN).

Estimated Project Cost: USD 963.20 Million

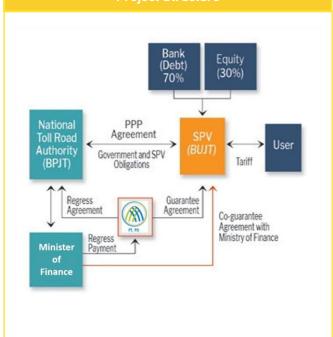
Financial Feasibility:

IRR : 12.48%

NPV: USD 45.85 Million

Concession Period: 40 years

Project Structure



Contact Person : Denny Firmansyah (Head of Investment Division) +6221-7258063

bpjt@pu.go.id

Solo - Yogyakarta - Kulonprogo (NYIA) Toll Road

Location: Yogyakarta & Central Java Provinces





Project Status:

Project is currently under construction

Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Investor:

PT Yogyasolo Marga Makmur

- 1. PT Daya Mulia Turangga-Gama Group
- 2. PT Jasa Marga (Persero) Tbk
- 3. PT Adhi Karya (Persero) Tbk

Financier:

Financial Close: Deadline 10 Juli 2022

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Land Acquisition : Jateng Aug 2020-Dec 2022, DIY Jan 2021-Sep 2023

2. Construction :

Kertosuro-Purwomartani Jan 2021-Dec 2023 Purwomartani-Sleman Oct 2021-Dec 2023 Sleman-Purworejo Dec 2022-Dec 2024

3. Operation :

Kertosuro-Purwomartani Jan 2024 Purwomartani-Sleman Jan 2024 Sleman-Purworejo Jan 2025

Sub-Sector: Toll Road

Description:

The development of Solo-Yogyakarta-Kulon Progo (New Yogyakarta International Airport/NYIA) Toll Road is part of the Southern Java Road Network, stretching from Gede Bage in West Java province to Solo in Central Java. The toll road will run for 96.57 km, divided into three sections: Kartasura-Purwomartani, Purwomartani-Gamping, and Gamping-Kulon Progo (NYIA).

Estimated Project Cost: USD 1,799.78 Million

Financial Feasibility:

IRR : 12.03%

NPV: USD 151.68 Million

Concession Period: 40 years

Equity (30%) Agreement Toll Road Authority Government and SPV Tariff **Obligations** Guarantee Agreement Co-guarantee Agreement with Ministry of Finance Regress Minister **Finance**

Contact Person : Denny Firmansyah (Head of Investment Division) +6221-7258063 bpjt@pu.go.id

Preservation of Eastern Sumatera National Road in Riau Province

Location: Riau Province



Project Status:

Project is currently under construction

Government Contracting Agency:

Minister of Public Works and Housing

Investor:

PT Adhi Jalintim Riau

1. PT Adhi Karya (Persero) Tbk;

Financier:

PT Bank Syariah Indonesia (BSI) Syndicate PT. Sarana Multi Infrastruktur (SMI)

Government Support & Guarantee:

- Project Development Facility (PDF)
- Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : 2017
 Land Acquisition : 2019
 Construction : 2021-2024
 Operation : 2024-2036

Sub-Sector: Non-Toll Road

Description:

One of the Eastern Sumatra Roads in the Province starting from the Kayu Ara Intersection (Pekanbaru City) to Lago Intersection (Pelalawan Regency) consists of three streets that could be categorized as a National Road which is correlated towards the national economic growth. The approximate total length of this project will be 43 km. Investment return is in form of Availability Payment.

Estimated Project Cost: USD 35.51 Million

Financial Feasibility:

IRR : 9.81%

NPV : USD 887,729

Concession Period: 15 years (3 years contruction + 12 years operation)

Minister of Finance Republic of Indonesia Regress Agreement Regres

Contact Person : Ir. Pantja Dharma Oetojo, M.Eng.Sc

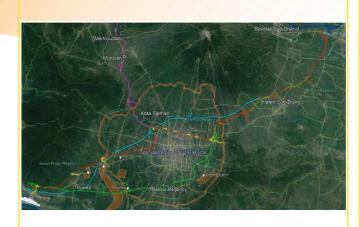
Deputy Director of Integreted System for Roads and Bridges Network

+ 62-811238264; subdirektoratksjj @gmail.com

Gilimanuk - Mengwi Toll Road

Location: Bali Province





Project Status:

Project is currently under construction

Government Contracting Agency:

Head of Indonesia Toll Road Authority (BPJT)

Investor:

PT Jagat Kerthi Bali

- 1. PT Sumber Rhodium Perkasa
- 2. PT Cipta Sejahtera Nusautama,
- 3. PT Bumi Sentosa Dwi Agung.

Financier:

Financial Close: Deadline Q1 2024

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Construction : Q3 2023 2. Operation : Q3 2025

Sub-Sector : Toll Road

Description:

The project is to construct ± 96,84 km of The Gilimanuk-Mengwi toll road with PPP scheme. The starting point located in Gilimanuk-Jembara District and the end point is located in Mengwi-Badung District.

Estimated Project Cost: USD 1,663.79 Million

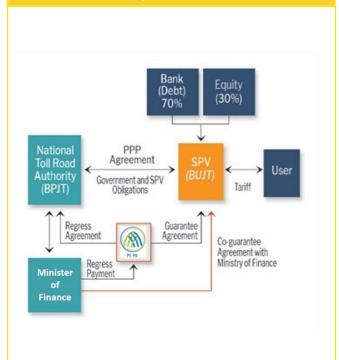
Financial Feasibility:

IRR :: 11.46%

NPV : USD 10.65 Million

Concession Period: 50 years

Project Structure



Contact Person : Denny Firmansyah (Head of Investment Division) +6221-7258063

bpjt@pu.go.id

Development of West Semarang Water Supply System

Location: Semarang City, Central Java Province



Project Status:

Project is currently operational.

Government Contracting Agency:

Director of Tirta Moedal Regional Water Supply Company

Investor:

PT. Air Semarang Barat:

- 1. PT Aetra Air Jakarta; dan
- 2. PT Medco Gas Indonesia

Financier:

Bank Central Asia (BCA)

Government Support & Guarantee:

- Supports from Regional Government
- PDF from Ministry of Finance
- Supports from the Ministry of Public Works and Housing
- Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : 2017
 Land Acquisition : 2019
 Construction : 2019 - 2021
 Operation : 2021

Sub-Sector : Water Supply System

Description:

West Semarang Water Supply project is built with a capacity of 1,000 liters per second. The service area is planned to serve three (3) subdistricts divided into five (5) service zones.

Estimated Project Cost: USD 28.20 Million

Financial Feasibility:

IRR : 9.07%

NPV: USD 15.86 Million

Concession Period: 27 years (including 2 years

construction)

Project Development Fund for final Business Case Preparation and Insraection Advisor Support MoPW&PH Construction Suport Distribution System Sopra Construction ORM Contract ORM Contract Insurrance Firm

Contact Person : E. Yudi Indardo, ST, MPPM, M. Ak (Director of Tirta Moedal Water

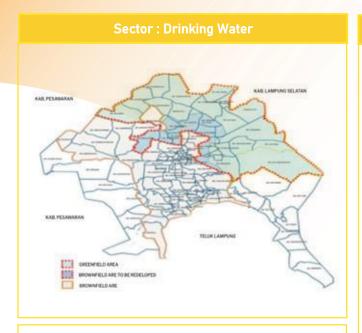
Supply Company) +62-24-8315514

smgwater@gmail.com

+6221 - 7264230

Development of Bandar Lampung Water Supply System

Location: Bandar Lampung, Lampung Province



Project Status:

Project is currently operational

Government Contracting Agency:

Director of Way Rilau Water Supply Company, Bandar Lampung

Investor:

- 1. Bangun Cipta Contractor;
- 2. Bangun Tjipta Sarana.

Government Support & Guarantee:

- Viability Gap Fund from Ministry of Finance
- Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : 2017
 Land Acquisition : 2018
 Construction : 2019
 Operation : 2020

Sub-Sector: Water Supply System

Description:

The Project scope includes the financing, construction, operation and maintenance of water supply systems, covering raw water intake with the capacity of 825 lps; water treatment plant with a production capacity of 750 lps; ± 22 km of Ø 1,000 mm water transmission pipeline; reservoir with a capacity of $\pm 10,000$ m³; and the development of parts of distribution network with pumping system (primary and secondary distribution network).

Estimated Project Cost: USD 81.48 Million

Financial Feasibility:

IRR : 16%

NPV : USD 20.42 Million

Concession Period: 25 years

Minister of Public Works and Housing -Covernment is laid -Nater Loose Bandar Lampung Municipal Seporting Government Gov

Contact Person : Supardji (Technical Director of Way Rilau Regional Water Company)

+62-721-483855

kpbuspam@pdamwayrilau.com

Development of Umbulan Water Supply System

Location: East Java Province



Project Status:

Project is partially operational

Government Contracting Agency:

Governor of East Java Province

Investor:

PT Meta Adhya Tirta Umbulan

Financier:

PT IIF and PT SMI (Persero)

Government Support & Guarantee:

- VGF from the Ministry of Finance
- Financial project support from the Ministry of Public Works and Housing
- Financial project support from the Government of East Java
- Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : 2011 - 2016
 Land Acquisition : 2016 - 2019
 Construction : 2017 - 2021

4. Operation : 2021

Sub-Sector: Water Supply System

Description:

The Umbulan Water Supply Project aims to increase the water supply capacity to meet the demand in the East Java Province. The capacity of the drinking water is 4,000 lps at Pasuruan Regency, Pasuruan City, Sidoarjo Regency, Surabaya City, Gresik Regency, and PTAB (Industrial Area) connecting approximately 320,000 households.

Estimated Project Cost: USD 138.92 Million

Financial Feasibility:

IRR : 12.09%

NPV: USD 33.74 Million

Estimated Concession Period: 25 years

PT SMI Project Preparation Regress Agreement Regress Agreement PSurnan Regency Pasuruan Municipal Surabaya Municipal Regional Government Support SPDAM Project Preparation Regress Agreement PPP Agreement Water Tariff Regional Government Support Regional Government Support SPDAM

Contact Person : Ir. Baju Trihaksoro, MM (Head of PRKPCK Department)

+62-31-8287275

timsimpulspamumbulan2019@gmail.com

Development of Pekanbaru Water Supply System

Location: Pekanbaru City, Riau Province



Project Status:

Project is currently under construction and partially operational

Government Contracting Agency:

Director of Tirta Siak Water Supply Company

Investor:

PT PP Tirta Madani (Consortium of PT PP Infrastruktur - PT Memiontec Indonesia)

Financier:

Syndication of PT Indonesia Infrastructure Finance (Persero) and PT Sarana Multi Infrastruktur (Persero)

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Operation start : July 16, 2021 Commercial Operation Date : Sept 30, 2022

Sub-Sector: Water Supply System

Description:

The purpose of the Pekanbaru Drinking Water Supply System is to provide reliable drinking water infrastructure and increase economic activities in Pekanbaru City. The Main Project Scope is to Rehabilitation Uprating Existing Water Treatment Plants (WTP) into 500 l/s, Construction of New Water Treatment Facility of 250 l/s, and construct of pipe distribution network until 162 km.

The total Capacity of this Project is 750 l/s and will Coverage of 61.000 House connections for 7 districts in Pekanbaru City.

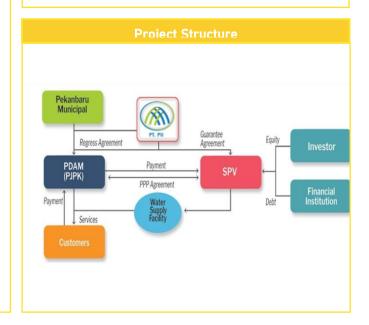
Estimated Project Cost: USD 33.78 Million

Financial Feasibility:

IRR : 16.72 %

NPV : USD 18.74 Million

Concession Period: 25 years



Contact Person : Agung Anugrah (Director of Tirta Siak Water Supply Company)

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pdamts.kpbu@gmail.com

Development of Jatiluhur I Regional Water Supply System

Location: West Java and DKI Jakarta Provinces





Project Status:

Project is currently under construction

Government Contracting Agency:

Minister of Public Works and Housing

Investor:

- 1. PT Jaya Konstruksi Manggala Pratama Tbk
- 2. PT Wijaya Karya (Persero) Tbk
- 3. PT Tirta Gemah Ripah

Financier:

- 1. PT Bank Mandiri Tbk (Lead Lenders)
- 2. PT Sarana Multi Infrastruktur
- 3. PT Bank Pembangunan Daerah Jawa Barat & Banten

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Preparation : Q1 2013 - Q4 2019
 Land Acquisition : Q1 2020 - Q3 2022
 Construction : Q1 2022 - Q2 2024
 Operation : Q3 2024 - Q4 2051

Sub-Sector: Water Supply System

Description:

Jatiluhur I Regional Water Supply system has an outflow of 4,750 lps that will supply Karawang Regency, Bekasi Regency, Bekasi City, and DKI Jakarta. The project covers the construction of intake, transmission pipeline, water treatment plant (WTP), and the development of the main network.

Estimated Project Cost: USD 113.17 million

Financial Feasibility:

IRR : 12.46 %

NPV : USD 26.62 million

Concession Period: 30 years

Regional Governments DKI Kota Kab. Kab. Jakarta Bekas Karawang 1. PDAM as Offsaker 2. Construct Distribution Pipe PDAM DKI Kota Kab. Kab. Bulk Water Payment Bulk Water Supply Bul

Contact Person : Dahlia Napitupulu (Head of Sub-directorate of Coordination Investment

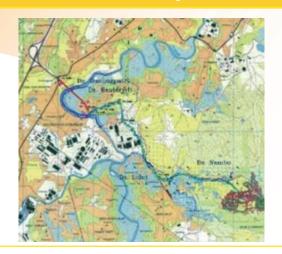
Partnership for Human Settlements Infrastructure, Directorate General of

Infrastructure Financing, Ministry of Public Works and Housing)

Nambo Regional Waste Management System

Location: Bogor Regency, West Java Province

Sector : Waste Management



Project Status:

Project is currently under construction

Government Contracting Agency:

Governor of West Java

Investor:

PT Jabar Bersih Lestari

 Consortium of Euwelle Environmental Technology and PT Jasa Sarana

Government Support & Guarantee:

Tipping Fee

Implementation Schedule:

Preparation : 2014
 Land Acquisition : 2015

3. Construction : 2017 - 2023

4. Operation : 2022 (40% capacity)

2023 (full capacity)

Sub-Sector: Waste Management System

Description:

The capacity of Nambo waste processing technology is 1,650-1,800 tonnes/day. Targeted facility is to produce some recycled products such as compost, refused derived fuel (RDF) and other recyclable materials.

Estimated Project Cost: USD 43.05 Million

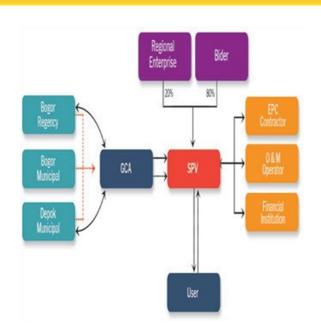
Financial Feasibility:

IRR : 13.60%

NPV : USD 4.74 Million

Concession Period: 25 years

Project Structure



Contact Person : Arief Perdana, ST. MT (Head of Regional Waste Management Divison)

+62-22-7319782; +62-22-7319735

pstrdlh@gmail.com

Development of Palapa Ring West Package

Location: Sumatera and West Kalimantan Region





Project Status:

Project is currently operational

Government Contracting Agency:

BAKTI on behalf of Minister of Communication and Informatics

Investor:

- 1. PT Mora Telematika Indonesia
- 2. PT Ketrosden Trasmitra

Financier:

PT Bank Mandiri

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Operation : 2018

Sub-Sector : Telecommunication Network

Description:

Development of fiber optic-based broadband telecommunication network which will connect Riau Province, Riau Islands, and the Natuna Island with a total length of 2,123 km.

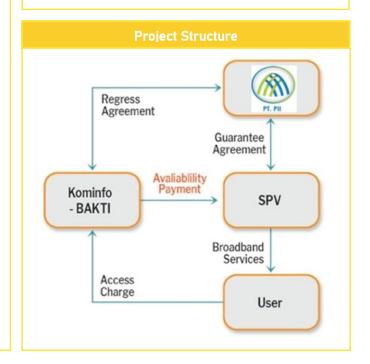
Estimated Project Cost: USD 86.42 Million

Financial Feasibility:

IRR : 15.08%

NPV : USD 8.48 Million

Concession Period: 15 years



Contact Person : M. Feriandi Mirza (Head of Infrastructure Backbone Division)

+62 819 0830 8450

feriandi.mirza@baktikominfo.id

Development of Palapa Ring Central Package

Location: Kalimantan, Sulawesi, and Maluku Region

Sector: Telecommunication and informatics



Project Status:

Project is currently operational

Government Contracting Agency:

BAKTI on behalf of Minister of Communication and Informatics

Investor:

Consortium of Pandawa Lima

- 1. PT Len Industri (Persero)
- 2. PT Teknologi Riset Global Investama
- 3. PT Multi Kontrol Nusantara
- 4. PT Bina Nusantara Perkasa

Financier:

Syndication of PT Indonesia Infrastructure Finance (Persero), PT. Bank BNI (Persero), and PT Sarana Multi Infrastruktur (Persero)

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Operation : 2018

Sub-Sector: Telecommunication Network

Description:

Development of fiber optic-based broadband telecommunication network covering 17 regencies across Kalimantan, Sulawesi, and Maluku. with a total length of 3,103 km.

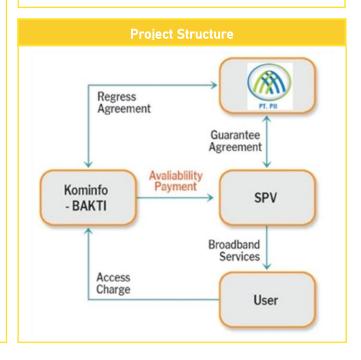
Estimated Project Cost: USD 70.54 Million

Financial Feasibility:

IRR : 12.63%

NPV : USD 11.34 Million

Concession Period: 15 years



Contact Person : M. Feriandi Mirza (Head of Infrastructure Backbone Division)

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Development of Palapa Ring East Package

Location: East Nusa Tenggara, Maluku and Papua Region



Project Status:

Project is currently operational

Government Contracting Agency:

BAKTI on behalf of Minister of Communication and Informatics

Investor:

- 1. PT Mora Telematika Indonesia
- 2. PT Infrastruktur Bisnis Sejahtera
- 3. PT Inti Bangun Sejahtera
- 4. PT Smart Telecom

Financier:

Syndication of PT Bank BNI ICBC Indonesia, Bank Papua, Bank Maluku Malut and Bank Sulsebar.

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Operation: 2019

Sub-Sector: Telecommunication Network

Description:

Development of fiber optic-based broadband telecommunication network covering 35 regencies across East Nusa Tenggara, Maluku, West Papua, and remote areas in Papua with a total length of 7,002 km.

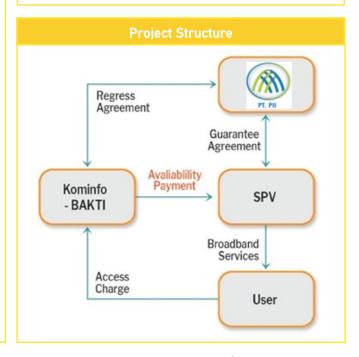
Estimated Project Cost: USD 381.27 Million

Financial Feasibility:

IRR : 14.30%

NPV: USD 22.49 Million

Concession Period: 15 years



Contact Person : M. Feriandi Mirza (Head of Infrastructure Backbone Division)

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Central Java Power Plant

Location: Batang Regency, Central Java Province





Project Status:

Project is currently operational

Government Contracting Agency:

Indonesia Electricity Company (PT. PLN (Persero)

Investor:

- 1. PT J-Power
- 2. Adaro Power
- 3. Itochu Corporation

Financier:

Bank Mandiri

Government Support & Guarantee:

- Land Acquisition
- Government Guarantee from IIGF (PT PII)

Implementation Schedule:

1. Land Acquisition: 2011

2. Construction : 2016 - 2021

3. Operation : 2022

Sub-Sector: Power Plant

Description:

This project is the development of a coal-fired power plant in Batang Regency, Central Java with a capacity of 2x1,000 MW. It is considered the largest PPP electricity project by capacity in Asia.

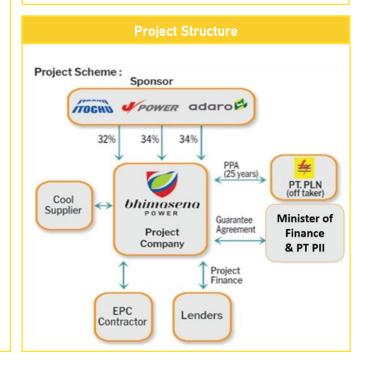
Estimated Project Cost: USD 4,143.24 Million

Financial Feasibility:

IRR : 11.12%

NPV: USD 926.01 Million

Concession Period: 25 years



Contact Person : Marketing Manager of Strategic IPP

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Development of Multifunction Satellite

Location: National

Sector: Telecommunication & Informatics



Project Status:

Project is currently under construction

Government Contracting Agency:

Minister of Communications and Informatics

Investor:

PT Pasifik Satelit Nusantara, PT Dian Semesta Sentosa, PT Pintar Nusantara Sejahtera and PT Nusantara Satelit Sejahtera

Financier:

Asian Infrastructure Investment Bank, The Hongkong and Shanghai Bank Corporation Limited, The Korea Development Bank and Banco Santander, S.A dan BPI France Assurance Export

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Land Acquisition : Q1 2021 - Q2 2022 Construction : Q3 2020 - Q4 2023

Operation : Q4 2023

Sub-Sector: Telecommunication Network

Description:

The Multifunction Satellite Project, known as Satellite of Republic Indonesia (Satria). The satellite, designed to have a throughput capacity of 150 billion bits per second (Gbps), is expected to provide internet services to 150,000 public facilities, including schools and health centers, as well as defense establishments, security administrations, and all regional government offices all over Indonesia.

Satellite technology has become a solution to address the gap in broadband internet access in Indonesia, as an archipelagic country, which has challenging geographical situation

Estimated Project Cost: USD 433.84 Million

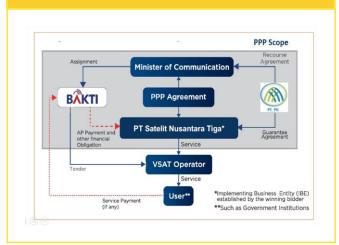
Financial Feasibility:

IRR : 9.32%

NPV : USD 12.43 Million

Concession Period: 15 years

Project Structure



Contact Person : R. Sri Sanggrama Aradea (Head of Satellite Infrastructure Division)

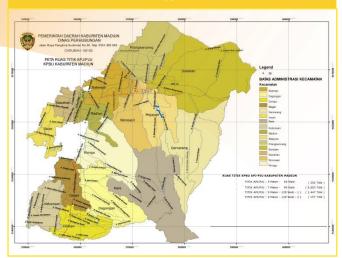
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Madiun Street Lighting

Location: Madiun Regency, East Java Province

Sector: Energy Conservation



Project Status:

Project is currently under construction

Government Contracting Agency:

Regent of Madiun

Investor:

PT Tri Tunggal Madiun Sejahtera

Financier:

NTB Syariah Bank

Government Support & Guarantee:

Government Guarantee from IIGF (PT PII)

Implementation Schedule:

Operation : Juli 2023

Sub-Sector: Street Lighting

Description:

Provide convenience and public services to the community by providing ideal APJ conditions and it is expected to grow a new economic center in Madiun district from all sectors. Development of new APJ with a total of 7,459 APJ points spread across 15 Districts.

Estimated Project Cost: USD 7.7 Million

Financial Feasibility:

IRR : 10,67 %

NPV : USD 0.61 Million

Concession Period: 1 years Construction

and 10 Years Operation

Sectoral Ministry Regulator Recourse Agreement GCA Street Lighting Tax Revenue AP Payment Lender Equity Sponsor Equity Sponsor Family Formers of Public Services Propriets of Public Services Propriets of Public Services Formers of Public Serv

Contact Person : Kurnia W (PPP Node)

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Glossary

Abbreviation	Definition
FIA	Environmental Impact Assessment
EIA	Analisis Mengenai Dampak Lingkungan (AMDAL)
AD	Availability Payment
АР	Pembayaran Ketersediaan Layanan
BAPPENAS	Badan Perencanaan Pembangunan Nasional
BAPPENAS	National Development Planning Agency
ВКРМ	Badan Koordinasi Penanaman Modal
BKPM	Indonesia's Investment Coordinating Board
DLU	Badan Layanan Umum
BLU	Public Service Agency
ВОТ	Build-Operate-Transfer
BUI	Bangun-Guna-Serah
DD IT	Badan Pengelola Jalan Tol
BPJT	Indonesia Toll Road Authority
CDC/CDV	Special Purpose Company / Special Purpose Vehicle
SPC/SPV	Badan Usaha Pelaksana (BUP)
EDC	Final Business Case
FBC	Kajian Akhir Prastudi Kelayakan
FIDD	Financial Internal Rate of Return
FIRR	Tingkat Pengembalian Investasi Keuangan
FS	Feasibility Study
гэ	Studi Kelayakan
GCA	Government Contracting Agency
GCA	Penanggung Jawab Proyek Kerjasama (PJPK)

Abbreviation	Definition
CDD	Gross Domestic Product
GDP	Produk Domestik Bruto (PDB)
LABAR	Land Acquisition and Resettlement Action Plan
LARAP	Rencana Pembebasan Lahan dan Pemukiman Kembali
LVDD	Lembaga Kebijakan Pengadaan Barang dan Jasa Pemerintah
LKPP	National Public Procurement Agency
MaF	Ministry of Finance
MoF	Kementerian Keuangan
MDV	Net Present Value
NPV	Nilai Uang Sekarang
000	Outline Business Case
OBC	Kajian Awal Prastudi Kelayakan
0014	Operation & Maintenance
0&M	Operasional dan Pemeliharaan
DDAM	Perusahaan Daerah Air Minum
PDAM	Regional Water Utility Company
DDE	Project Development Facility
PDF	Fasilitas Penyiapan Proyek
PT. PLN	Perusahaan Listrik Negara
(Persero)	State Electricity Company
DO	Pre Qualifcation
PQ	Pra Kualifkasi
DDD	Public Private Partnership
PPP	Kerjasama Pemerintah dan Badan Usaha (KPBU)
D	Pre-Feasibility Study
Pre-FS	Pra Studi Kelayakan

Abbreviation	Definition
PT SMI (Persero)	PT Sarana Multi Infrastruktur (Persero)
PT PII	PT Penjaminan Infrastruktur Indonesia (Persero)
PIPII	Indonesia Infrastructure Guarantee Fund (IIGF)
DED	Request for Proposal
RFP	Permintaan untuk Proposal
DIVI	Rencana Pengelolaan Lingkungan
RKL	Environmental Management Plan
DDI	Rencana Pemantauan Lingkungan
RPL	Environmental Monitoring Plan
RPJMN	Rencana Pembangunan Jangka Menengah Nasional
KPJMN	The National Medium-Term Development Plan
DOE	Regional Owned Enterprise
ROE	Badan Usaha Milik Daerah
SOE	State Owned Enterprise
SUE	Badan Usaha Milik Negara
VGF	Viability Gap Funding
VGF	Dukungan Kelayakan
Lps	Liters per second Liter per detik



REPUBLIC OF INDONESIA MINISTRY OF NATIONAL DEVELOPMENT PLANNING/ NATIONAL DEVELOPMENT PLANNING AGENCY

PUBLIC PRIVATE PARTNERSHIP

INFRASTRUCTURE PROJECTS PLAN IN INDONESIA 2023