



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

# PUBLIC PRIVATE PARTNERSHIP

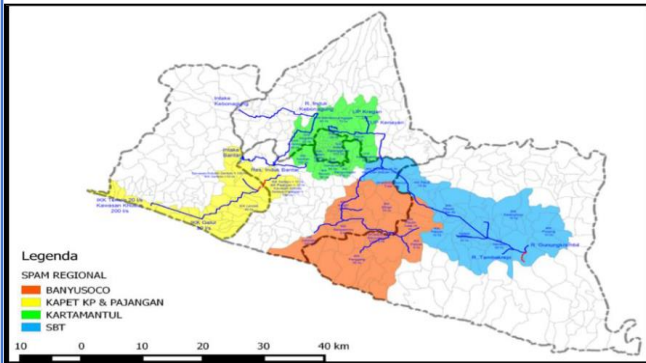
INFRASTRUCTURE PROJECTS PLAN IN INDONESIA

# 2022

# Development of Kamijoro Regional Water Supply System

Location : Kulon Progo and Bantul, Special Region of Yogyakarta

## Sector : Water Supply



Kamijoro Regional Water Supply System is indicated by yellow marked area

### 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

### Description:

Kamijoro Regional Water Supply system is a provincial project in the Special Region of Yogyakarta, that aimed to supply the drinking water (Air Minum Curah) to the regencies of Bantul and Kulon Progo. The project was initiated due to limited water resources for local people, while also supporting the current development of New Yogyakarta International Airport and industrial areas within both regencies. The project utilizes bulk water from the Progo River through Kamijoro Dam, which has been planned to supply 475 lps drinking water, consisting of 189 lps to Bantul Regency and 286 lps to Kulon Progo Regency.

The involvement of private sectors through PPP is expected to overcome project cost constraints while improving the quality and continuity of water supply services. The scope of the Special Purpose Company ("SPC") is developing Water Treatment Plant ("WTP") and main distribution pipeline, as well as operating the system during the concession period. The further scope will be studied and finalized in FBC Final Report.

**Estimated Project Cost:** USD 22.28 – 24.11 Million

### Financial Feasibility:

IRR : 15%

NPV : Under Calculation

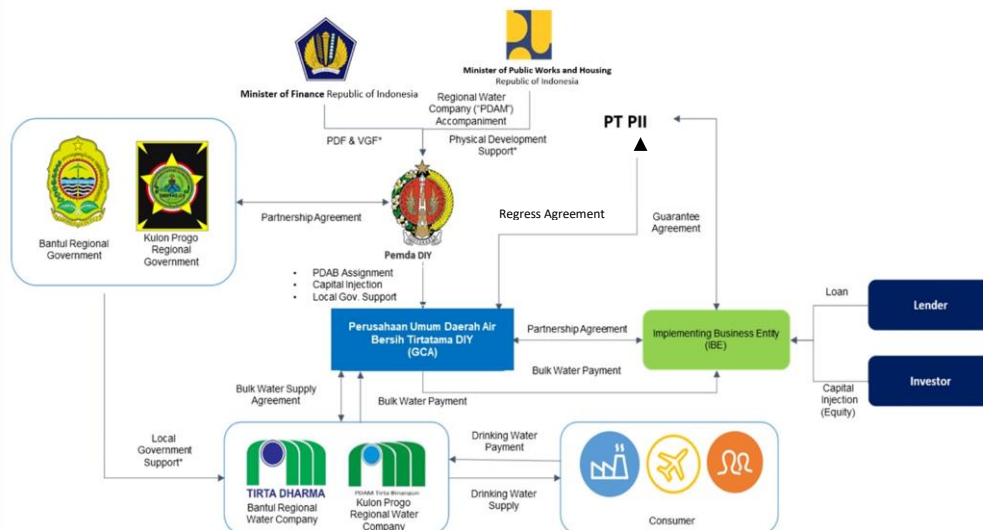
**Estimated Concession Period:** 25 years

## Indicative Project Schedule



Project Status : Final Business Case

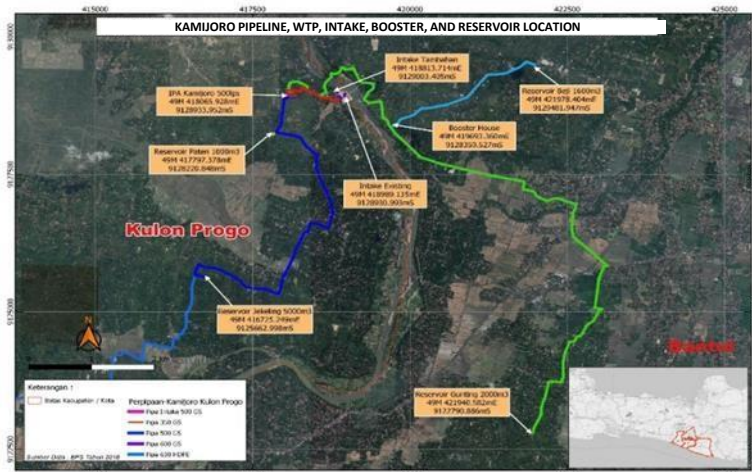
## Indicative Project Structure



## Project Digest

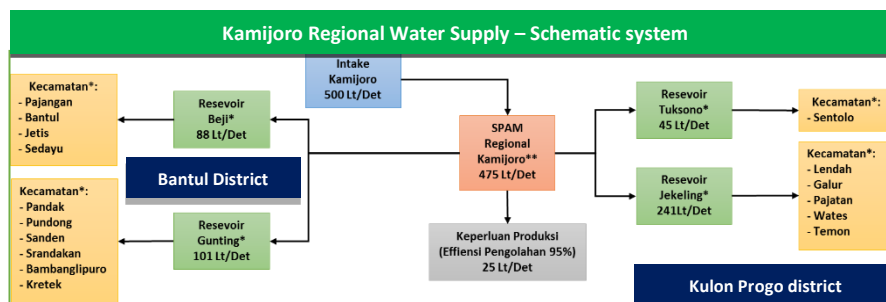
<b>Project Title</b>	<b>Construction of Kamijoro Regional Water Supply System</b>
<b>Government Contracting Agency</b>	Governor of Special Region of Yogyakarta hand over to Perumda Air Bersih Tirtatama DIY
<b>Implementing Agency</b>	Public Works, Housing, and Energy and Mineral Resources Agency, Special Region of Yogyakarta
<b>Preparation Agency</b>	National Development Planning Agency and PT Sarana Multi Infrastruktur (PDF assignment by the Ministry of Finance)
<b>Project Cost</b>	USD 22.28 – 24.11 Million
<b>Estimated Concession Period</b>	25 years
<b>Location</b>	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.

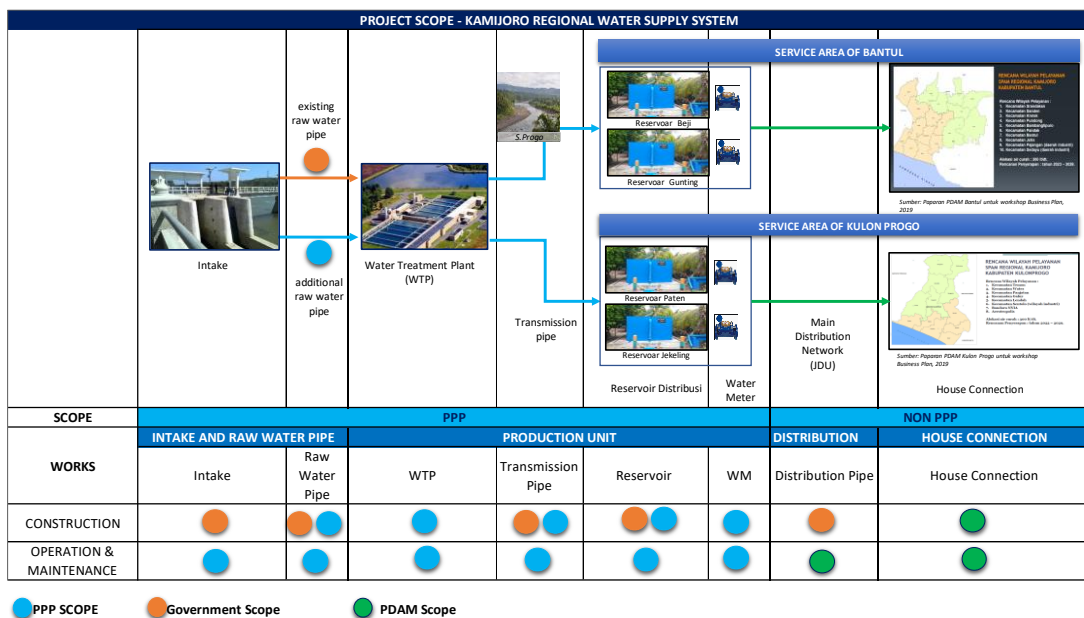
### 2.2. Project Description

- 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.
5. 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*).

## 6. Land Acquisition and Resettlement Action Plan

- The required land acquisition along with the intake facility has been undertaken by the Ministry of Public Works and Housing.
- The needed land acquisition for the Water Treatment Plant, and reservoirs Tuksono and Jekeling in Kulon Progo Regency has been acquired by the Government of Special Region of Yogyakarta.
- Land acquisition for reservoirs Gunting and Beji in Bantul Regency will be undertaken by the Government of Special Region of Yogyakarta, targeted in 2022.
- The Land Acquisition Resettlement Action Program (“LARAP”) document is under progress.
- SPC will undertake any other permit required during construction and operation.

## 7. Project Cost Structure

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

Estimated Project Cost		USD 22.28 – 24.11 Million
Indicative Debt to Equity Ratio		13,73 %
- Debt Level		70%
- Equity Level		30%
IRR		15 %
NPV		Under Calculation

## 8. Government Support and Guarantee

The Government support and guarantee will be determined in the FBC final report.

## 9. Contact Information

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