



# IUWASH PLUS

## USAID – SECO Partnership Component



Country/Region  
Indonesia

Executing  
Agency

USAID

Government  
Partner  
Ministry of  
Planning  
(Bappenas)

Project  
Duration  
2019-2022

Budget  
USD  
4'500'000

### Rationale

The overall objectives of the program are to improve the technical and financial performance of seven water utilities (PDAMs) with a special focus on reducing non-revenue water (NRW) and increasing energy efficiency (EE).

Despite the provision of multiple trainings to PDAM staff over the years, NRW rates remain high at an estimated rate of 33%. NRW is essentially water lost for “commercial” reasons (such as inaccuracies in meter reading and/or non-registered customers / consumption) as well as “technical” reasons (including leakages within the network due to poor pipe quality or inappropriate installation). Thus, water quantity is severely reduced, water quality is seriously degraded, water pressure is inconsistent, utility revenue is substantially lowered, and customer confidence in the PDAM is eroded due to the overarching poor quality of service.

In addition, PDAMs – especially those heavily reliant on groundwater – spend a substantial portion of their operating budgets on electricity costs (often more than 30% of a utility’s total operating budget). This electricity is used, for example, to pump groundwater to the surface, raw water to treatment plants, treated water to customers, as well as support the functioning of other electro-mechanical systems. While some electricity consumption will always be necessary, studies have shown that many utilities could cut their operating costs by as much as 20% if they upgraded to more efficient systems or performed more routine maintenance services.

PDAMS lack the technical expertise, as well as equipment required to accurately measure levels and locations of specific NRW and EE problems. This means that PDAMs remain largely unaware of the exact breakdown of NRW and EE components, rendering decision-making and focused investments difficult at best.

### Objectives and Activities

The SECO-supported initiative provides for a more concerted effort in NRW and EE programming. By combining support in “software” (e.g. trainings, studies, technical assessments and action planning) with the stakeholder commitment to investments in “hardware” (e.g. meters, piping, pumps, etc.), the proposed portfolio of interventions will improve the technical and financial

performance of seven PDAMs in West and Central Java. SECO's co-financing will serve as a showcase for integrated, at-scale NRW/ EE programming which combines the availability of measuring equipment, dedicated (on-the-ground) technical expert staff, robust monitoring, and extensive grant support from committed PDAMs and the Government of Indonesia at large.

The SECO-funded program focuses on three areas, namely (1) NRW reduction, (2) EE increase, and (3) capacity building programs covering various technical and non-technical topics. The following PDAMs will receive SECO support:

	Location	NRW Reduction	EE Increase	Capacity Building
<b>West Java</b>	PDAM of Depok City	√		√
	PDAM of Bogor District	√	√	√
	PDAM of Karawang District	√	√	√
<b>Central Java</b>	PDAM of Surakarta City	√	√	√
	PDAM of Magelang City	√		√
	PDAM of Magelang District	√		√
	PDAM of Sukoharjo District	√	√	√

The following list summarizes the main program targets:

- 60,000 Indonesians with access to better (basic) water services;
- 600 PDAM staff trained in NRW, EE and other technical and non-technical topics of planning, operation and monitoring
- Between 5-7% reduction of current NRW in 7 PDAMs, compared to baseline determined at start of the program;
- Approximate 15% increased energy efficiency, measured through the Specific Energy Consumption (in KWH/m<sup>3</sup> pumped) for at least 8 pumping systems in 4 PDAMs;
- Leveraging of an estimated \$2.5 million in SECO funding through additional investments by PDAM, GOI and others (estimated at approximately IDR 5 billion or \$350,000 per PDAM)

#### Results to Date

- Feasibility Studies on the NRW level for the 7 collaborating PDAMs have been completed. The studies show, amongst others, agreed strategies on reducing NRW and investment commitment from Local Governments to further improve NRW and EE in the respective water utilities.
- New energy-efficient pumps have been installed in Karawang and Bogor, under installation in Surakarta and Sukoharjo, and in procurement process for Magelang.
- Water Utility Capacity Building Roadmap successfully launched with the full support of Ministry of Public Works and Housing. This roadmap will provide guidance to improve capacity of water utility staff nationwide.
- 3 of the 7 PDAMs have successfully been granted a grant approval letter (SPPH) from the Ministry of Finance which enables the water utilities to access World Bank's Performance Based Grant (PBG) in 2022.