

## **ABSTRACT**

Non-Revenue Water (NRW) is one of the problems faced by PDAM in many cities. NRW refers to unrecorded or non-Revenue-generated water losses by the PDAM, whether through leakage, theft, or unrecorded use. To overcome this problem, its necessary to have an effective and efficient monitoring system. In this study, we propose the design and implementation of an NRW monitoring system at PDAM Tirtawening in Bandung City using the Internet of Things (IoT) concept. The system is designed to collect real-time data about water flow, pressure, and condition status in PDAM pipes. System design involves installing sensors by the sensors will be sent via the internet for analysis and processing. Through the implementation of this IoT-based NRW monitoring system, its hoped that PDAM tirtawening can reduce losses due to NRW by detecting leaks more quickly and accurately. In addition, this system can also help improve the efficiency of managin the water distribution network of PDAM Tirtawening to optimize maintenance and repairs, and can improve the quality of service to customers.

Keywords : Non-Revenue Water, Internet of Things, Monitoring, Sensors