

WASAC's Smart-Metering and Machine-Learning Pilot Cuts Non-Revenue Water by 23% in Kigali, Rwanda

AI in the Public Sector · Good practice · Rwanda

Quality score: 53/100

Evidence strength: Moderate

Summary

Rwanda's state water utility WASAC piloted smart meters in Kigali and worked with researchers applying machine-learning predictive modelling to nearly a decade of network data, cutting non-revenue water by 23% within six months against a historical rate of 35–45%.

Key dimensions

Dimension	Score
Evidence of impact / measured public value	2/3
Transparency, fairness & accountability	2/3
Transferability / demonstrated replication	2/3
Scalability beyond pilot	1/3
Governance, capability & sustainability	1/3

Evaluated by C-NAPSE

Data sources

C-NAPSE web research — accessed 2026-09-04

WASAC Ltd (Water and Sanitation Corporation, Rwanda) — accessed 2026-09-04

IWA Publishing: Analyzing non-revenue water dynamics in Rwanda — ML predictive modeling — accessed 2026-09-04

IWA Publishing: Cost-effective non-revenue water reduction — pilot activities in Kigali City, Rwanda — accessed 2026-09-04

ESI Africa: Smart water meters to help REGIDESO and WASAC reduce non-revenue water — accessed 2026-09-04

Cite this — Evidoria. WASAC's Smart-Metering and Machine-Learning Pilot Cuts Non-Revenue Water by 23% in Kigali, Rwanda. Persistent ID: 37306e71-f007-4ed3-b2a7-dc9ed5ae5af9.