
Presented by The African Green Infrastructure Investment Bank (AfGIIB) and Water Asset Management LLC.

Clear, predictable, and enforceable investor-owned water and wastewater utility regulation has a proven, multi decade long track record in countries around the word for attracting hundreds of billions of dollars of private capital used to build, and as importantly maintain, the infrastructure that provides essential water and wastewater treatment, transmission, and water supply reliability. These same principals can be applied to attract private capital investment to solve water supply problems threatening life, economic growth, and social stability on the African Continent.

Presented here is a regulatory road map summarizing global best practices, core principals and key objectives of effective investor-owned water utility regulation. If implemented, these recommendations would help to attract large scale private capital from institutional investors who seek “TLC” – Transparency, Long duration opportunity, and regulatory Certainty.

Key Elements:

- **Trust building is an essential function of the regulatory regime.** Decision making, rulemaking, and tariff setting should be undertaken in a transparent manner that consciously seeks to demonstrate value of clean water availability service as well as engender public support from rate payers and to align the interests of management, investors, and environment with that of the regulators.

- **Provide regular independent data to consumers on improved water quality and service reliability to ensure recognition of value for tariffs paid.**

- **Pursuit of robust regulatory regimes should be the initial priority and emphasis among investors, regulators, and operators over technological “silver bullet” solutions.** Initial focusing on proper regulation creates lasting incentives for both water efficiency and conservation, which leads to the implementation of the most contextually appropriate and economically beneficial innovative technological solutions.

- **Universal metering:** if water is not measured, it cannot be managed, conserved, and priced appropriately.
Focus on ‘growing the whole pie’ rather than ‘growing the slice’. Regulation should incentivize water utility operators to seek performance for all stakeholders including investors, operators, ratepayers, and the environment.

- Focus must be on long term objectives, not short-term gains
- Rent-seeking behaviours must be strongly discouraged. i.e., lobbying should not produce an incremental short-term return.
- “When water utility investors and operators start focusing too much on the near term allowed returns; when that’s most of the conversation, you are losing the plot.”
- Pursue innovative and inclusive ownership structures such as partial mutualisation which benefit not only institutional investors but also includes rate payers as owners.

Tariff structures must be transparent, collaborative, and support full-cost pricing to cover all costs for water treatment, transmission, and reliable long-term supplies. This is the essential objective to develop a “perpetual flywheel” of ongoing capital investment which is essential in water and wastewater infrastructure.”

- Consider tiered volumetric pricing- the more water used, the higher the tariff per cubic meter. This can be an important tool for water conservation and generate additional revenue from those most able to afford it. In some cases, capacity charge can also be used as well to smooth certain infrastructure transitions.
- This approach is mutually inclusive with a regulatory regime that includes ‘social tariff’ structures for economically vulnerable rate payer groups including subsidized minimum water delivery with subsidized pricing.

Most important to long-term success is the nature of the regulatory regime, as applied to the ownership structure (i.e., public vs. private investor owned).

- Regulation must be structured to engender increased innovation and efficiency to justify a higher return on capital employed and weighted average cost of capital (WACC).
- Independence from the daily “political” process can best assure a sound and efficient system over the long term.

Additional high-level structural attributes that together make for a robust regulatory regime:

1) **Rational Geographic Boundaries**: Regulatory jurisdictions should be manageable in size and composition, and ideally should be geographically aligned to watersheds or regional catchment areas.

2) **Incentivize Outcomes, Not Outputs**:
   - An outcome-focused approach that is method agnostic provides operators with the greatest ability to innovate and reduce long-term costs to customers.
Regulatory emphasis on efficiently managing total costs, which include operational costs, and capital costs ("TOTEX") is a key enabler, as this provides operators with flexibility to adjust capex/opex splits over time.

An outcome-focused approach will continue to grow in importance as utility operators increasingly shift away from traditional, capex-intensive ‘hard path’ infrastructure and include more nature-based solutions.

- Example: Cover crop incentive scheme for UK farmers to address nitrogen run off pollution in lieu of water treatment plant construction. This achieved the same water quality goals at a 90% lower cost.

3) **Licensed Operator & Regulatory Ringfence:** To maintain focus, to the maximum extent possible regulatory regimes must be capable of operating independently and transparently, maintaining an arms-length relationship with government. Further structural attributes that facilitate successful regulation include:
  - Clear statutory duties bestowed upon the regulator
  - Regulatory asset base for the operator and investor
  - Clear and well-defined local rule of law, which stipulates regulatory enforcement and accountability, is paramount. This must exist locally and/or be guaranteed by credit worthy counter parties.
  - Where and when appropriate, establish high quality counterparty guarantees

4) **Build Iterative Flexibility:** Short-dated (2~5 year) periodic regulatory reviews for contractual tariff resets are preferable to longer-dated (~25+ year) systems. Long-dated systems tend to fall behind contemporary economic and resource realities, leading to trust and credibility erosion.

5) **Prioritize Cashflow Adequacy:** A foundational long-term responsibility and duty of a regulatory regime is to ensure sustainable ‘finance-ability’ of the operator over the long term.

For more information contact:

Hubert Danso  
Chairman  
The Continental Business Network (CBN)  
E: hubertd@nepad.org

Matthew J. Diserio  
President  
Water Asset Management, LLC  
E: m.diserio@waterinv.com