WATER TECHNOLOGIES DEMONSTRATION PROGRAMME

(A partnership between the Department of Science and Innovation and the Water Research Commission)

VVISDP: OPEN CALL for CITY OF TSHWANE

Innovative Technologies and Solutions as part of the Viability and Validation of Innovations for Service Delivery Programme (VVISDP).

The **Water Technologies Demonstration Programme (WADER)** invites Expressions of Interest (EOI) from technology developers/vendors in response to the **WADER Technology Scanning Call focusing on a number of innovative solutions for implementation at the City of Tshwane.**

The Department of Science and Innovation (DSI), in collaboration with the Water Research Commission (WRC), has established WADER to pull together the applied research and development and commercialisation stages of the water innovation continuum. Acting as an innovation intermediary, the Programme's mission is to facilitate high-level, collaborative technology demonstrators from the public and private sectors to maximise the potential of the water innovation value chain.

The Viability and Validation of Innovations for Service Delivery Programme (VVISDP), established by the Department of Science and Innovation, is a programme that aims to assist municipalities with the uptake of innovations. The Water Research Commission (WRC) established the Water and Sanitation Innovation Transfer Unit (WSITU) under the VVISDP, to enable the effective transfer and uptake of innovative solutions by the municipal sector.

The programme intends to support municipalities by providing expertise for the evaluation of new innovations for service delivery. This is done by creating a supportive environment for engagement on innovation initiatives and is implemented as part of the WADER programme.

The objective of this WADER Technology Scanning Call is to provide opportunities for innovators and commercial partners to showcase their technology and solutions in the following areas/categories:

A. Constructed Wetlands (specifically for 2 purposes - used as final polishing of effluent, and to serve as buffer for bypassing wastewater overflows);
B. Monitoring of water quality technology solutions (all parameters e.g., turbidity/contaminant indicators/alkalinity/etc.);
C. Real-time or fixed duration monitoring devices that continuously measure various water quality parameters such as pH, dissolved oxygen, turbidity, temperature, and conductivity can provide immediate data and can trigger alarms if thresholds are exceeded;
D. Maintenance management for preventative and corrective maintenance of water and sanitation infrastructure; monitoring of condition to measure and improve operational availability (Early fault detection and/or reporting systems, notification of relevant maintaining responsibilities, planning and scheduling of maintenance activities- corrective and preventive, monitoring progress and control, data analysis and prediction);

E. Water harvest and re-use at the point of consumption (Collecting black water at public and other users' front end ablution facilities, close circuit treatment to qualities fit for various recycling purposes/Innovative ways of collecting discarded used water in front end facilities to simplify treatment processes for recycling purposes and reduce the amount of water consumed);
F. Solids beneficiation solutions;
G. Removal of emerging pollutants;
H. Pre-paid and post-paid water metering solutions to improve revenue collection;
I. Water Balance Monitoring solutions that enables real-time monitoring of water balance from source to consumption across parameters such as flow/pressure/consumption.

The intention of this technology scanning call is to identify and ultimately pilot appropriate solutions within the categories mentioned above at a local municipality.

Requirements

The proposer should demonstrate the underlying scientific principles behind the technology and/or solution, provide the rationale supporting design features, operation and maintenance requirements and detail any previous demonstrations/implementation (number of units installed, performance metrics, location, scale, partners, performance outputs). A cost breakdown for the supply and installation of the proposed technology and/or solution should also be included, along with a key component list.

The proposal should assume that all preparation works/changes to infrastructure to allow for the installation of technology/solution fall outside of the scope of this call.

The proposer should also include a section on what makes their technology or solution innovative.

All proposals should be submitted on the EOI template provided (attached to this call). Proposals should be concise and include diagrams and photos.

EOI's in PDF format indicating which call the proposal is being submitted (e.g. FIRST OPEN CALL for ERWAT) must be emailed to Sarah Ravhudzulo (sarahr@wrc.org.za) and copying Dr Manjusha Sunil (manjushas@wrc.org.za) by close of business on **Monday, 04 December 2023 (16:00)**. Late applications will not be considered.

Budget

The WADER programme does not have a set budget for the water innovation demonstration. The proposer will have to propose the funding amount required for the proposed demonstration.

Please note that the awarding of the funding contract is at the discretion of the Water Research Commission.

COMMUNICATION WILL ONLY BE WITH SHORTLISTED CANDIDATES. IF YOU DO NOT RECEIVE A RESPONSE BY 07 DECEMBER 2023, PLEASE CONSIDER YOU APPLICATION UNSUCCESSFUL.

SHORTLISTED APPLICANTS SHOULD BE AVAILABLE DURING THE WEEK OF 8 TO 14 DECEMBER 2023 TO PITCH THEIR PROPOSAL (Details of the pitch will be shared with shortlisted candidates).

Contact

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WATER RESEARCH COMMISSION

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