

Workshop/Forum Details

Water Utilities around the world sit at the frontier of enabling the Sustainable Development Goals (SDGs). Given their varying mandates in the development and management of bulk water supply infrastructure; water, waste-water and sanitation treatment and solutions, and the support they provide in different municipalities these institutions are directly contributing to SDG 6 on clean water and sanitation. They also indirectly support a range of other SDGs pertaining to good health and wellbeing, zero hunger, life below water, sustainable cities and communities and others.

The effectiveness and success of water utilities in driving water security demands a high level of institutional resilience, skill and innovation. In order to adapt to the challenges of the present and future, water utilities need to be able to implement the best technologies and innovations on offer for the contexts in which they operate.

This is no easy task, given the speed of water sector technological development and knowledge evolution. Analogue and mechanical developments in terms of energy efficient pumps, variable speed drives, and acoustic water meters are plentiful. Digital and connectivity solutions in terms of IoT, physics based modelling, LAN technology, machine learning, and digital twins etc. are sky rocketing. In practise however, the implementation of new solutions demands a skilled understanding of technology implementation, appropriate skills within utilities and insight and experience in navigating the institutional requirements and rules when implementing new solutions.

This workshop will thus focus a key question:

How can you ensure that the latest know-how and the best available technological solutions are adopted and deployed at the most crucial level in the water value chain: The utility level?

To answer this main question, Danish/South African Water Sector Cooperation will bring partners together from utilities and municipalities in the South African and Danish context. Together we will reflect on lessons and share experience focusing on a range of issues:

- The barriers that hinder uptake, optimization and implementation of new technologies, processes and innovations? (This will be unpacked from the perspective of funding, incentives, governance issues, openness to technology adoption, appropriateness of technologies, etc).
- The sharing of key specific 'success' case studies to show how the testing and mainstreaming of new technologies and innovations can occur in practise
- Capturing of lessons about how to mainstream the testing and scale-up of new solutions into utility contexts.

This workshop will start off with a series of short pitch presentations from utility and municipal experts (from South Africa and Denmark). This will then move to a more interactive panel and audience debate session.

Activity (total 2:00)	Presenter	Time (min)
Opening session		
Welcome and introduction to the program	Facilitator: Dr Mamohloding Tlhagale, Head of International and Stakeholder Engagement, Water Research Commission	5
Opening keynote: <i>WRC contributions in bridging science to appliance</i>	Dr Dhesigen Naidoo, CEO Water Research Commission	10
Opening keynote: <i>The whip, the carrot and the triple helix</i>	Danish Ambassador Tobias Elling Rehfeld	10
Presentation of case stories		
Rand Water	Mogan Payadashee Rand Water	10
Umgeni Water	Dan Naidoo Umgeni Water	10
Mbombela Municipality	Wendy Tshawe, Mbombela Municipality	10
South African Private Water Utility	Shiyam Misra, SIZA Water	10
Danish Private Sector Company	Petrus van Heerden, Kamstrup	10
Aarhus Water Utility	TBC	10
Facilitated Panel Discussion	Facilitator	30
What is the expected outcome of this session and what impact on the water sector do you expect to have (max 60 words)		
It is expected that the workshop will inspire a discussion around barriers and solutions for technology adoption and deployment at utility level. The workshop will also form a platform for international knowledge sharing between South African and international practitioners		