

Background and Objective

The Manufacturing Circle facilitated a Water Roundtable on 7th November, hosted at BLSA's offices in Sandton, Johannesburg. Attendees included member companies, affiliate members and subject matter experts.

Supply-side challenges were discussed from the perspective of water as a key input for manufacturing operations, and solutions to improve water infrastructure and service delivery were reviewed.

Setting the Scene: Water Security in a Climate Insecure Future *(presentation attached)*

Dr. Henry Roman, International Water Management Institute (IWMI)

- The IWMI is an international organisation with a global network aimed at solving water problems and scaling solutions
- The concept of planetary boundaries has been established to understand global climate systems. If these boundaries are crossed there can be abrupt changes in weather patterns
- Current patterns indicate that water supply and climate challenges are worsening
- Water quality and use are mismatched with declining quality coupled with increasing use
- In the South African context water management and climate assessment is reviewed through the National Water Resource Strategy
- A key approach in addressing water issues within densely populated areas is to promote ecological infrastructure which would both address the issue of declining water quality and promote efficiency in use limiting the severe impact of climate change
- The secondary perspective that requires engagement is the circular economy approach aimed at bolstering reuse and feedback through different treatment standards and wastewater treatment

Case Study: Water Outage in the Olifantsfontein Industrial Area *(presentation attached)*

Ray Tolmay, Ardagh Glass Packaging Africa

- Manufacturers and industrialists within the Olifantsfontein area have to engage with several key challenges
- Water outages have become common throughout the Olifantsfontein industrial area with burst pipes, outdated infrastructure, lack of maintenance and non-operation of water pressure control systems being the primary causes
- Municipal contractors and councillors have been requesting assistance from factories given lack of capacity; resulting in limited monitoring of reservoirs, limited financial support and coordination issues
- The case of Clayville glass manufacturing notes the severe threat to industry arising from water outages. The Clayville plant is a major hazard without water as it is used for cooling machinery.
- Other factories such as distilleries and breweries are at even higher risk which leads to challenges of safety and insurability

Responses were tabled as follows:

- **Natasha Ramkirpal (Coca-Cola Bottling Africa)** There is a concern about water deterioration leading to factories investing in water treatment assets to acquire better water specifications. Currently, the water provided may have microplastics or pathogens.
- **Ray Tolmay:** Ardagh has engaged with various municipalities. There are solutions however limited capital and resources to implement these solutions
- **Ilse Karg (DTIC):** Funding access might not be the problem, rather budgets and fund allocation need to be addressed

Case Study: Public Private Collaboration Model: Limpopo Water Infrastructure

Nino Manus and Zimiti Chodeva, Public Sector and Infrastructure Transformation, PwC

- A Public Private Collaboration (PPC) model was presented as a way to fund and implement infrastructure development projects
- The model can address accelerated service delivery, focus on social development, facilitate shared funding and enable strong governance
- The case study discussed the implementation of the R28bn bulk and potable water infrastructure project in the Limpopo Province which is being executed as a PPC involving a range of government and private sector stakeholders
- Key lessons learned in engaging with the Limpopo project and PPC include:
 - building trust between business and government
 - stakeholder management and alignment
 - applying a circular economy approach
 - understanding that a PPC is not just about stakeholder management but includes definition of technical scope and boundaries for all stakeholders

Responses were tabled as follows:

- The PPC approach is based on shared risk and shared investment between the public and private sector
- The PPC model aims to promote collaboration among several key levels in government with the deputy minister of COGTA a notable proponent of the PPC model
- Despite the promising initiatives and accomplishments of PPCs it is key to understand that business and government approach matters from different bargaining bases
- The applicability of PPCs on smaller scale projects within municipalities needs to be assessed

Actions and Next Steps

- **Olifantsfontein Industrial Area briefing note**
MC to work together with Ardagh and other impacted industrialists to develop the Case Study on Water Outage in the Olifantsfontein Industrial Area into a briefing note, with a view to implementing a solution to address current service delivery challenges
- **PPC Municipal Model**
MC to work together with PwC, the DTIC and member companies to establish a public private collaboration model that is applicable for smaller scale municipal projects
- **Municipality Water Strategic Project**
MC to circulate draft Municipality Water Strategic Project Charter outlining objectives, actions, stakeholders and deliverables for feedback and comment, to inform MC 2024 workplan

Resources:

List of Industrial Water Efficiency Programmes and Offerings from the NCPC-SA

- [Best Practice Guide - Water](#)
- [Metering and Monitoring Guide](#)
- [Industrial Water Efficiency Best Practice Guide Food Processing](#)
- [Industrial Water Efficiency Assessment Guide \(Self-Constructed Industrial Water Efficiency Assessment: A Guide for Facility Water Champion\)](#)
- [Industrial Water Efficiency Metering and Monitoring](#)
- [Water Stewardship for Sustainable Water Management \(Standard Operating Procedures for Industrial Parks\)](#)
- [Resource Efficiency for Cheese and Yogurt Dairy Sector](#)

Attendees

Jerry Dungu	ArcelorMittal	Mike Benfield	Macsteel
Thami Mkhuzangwe	Ardagh Group	Philippa Rodseth	Manufacturing Circle
Ray Tolmay	Ardagh Group	Jo Bryden	Manufacturing Circle
Virgilio Da Molo	BUSA Localisation Fund	Deveena Subramony	Manufacturing Circle
Natasha Ramkirpal	CCBA Group	Kabelo Ntshudisane	Mpact
Mike du Toit	City of Ekurhuleni	Retondwa Sigama	NCPC-SA
Theuns Reinecke	Clover	Lindani Ncwane	NCPC-SA
Brent Goliath	CSIR	Shabeer Jhetam	Packaging SA
Ilse Karg	DTIC	Tamaryn Whittal-Steynberg	PG Bison
Tumi Tsehlo	Dynamic Fluid Control	Pieter Theron	PwC
Richard Amlima	Frigoglass	Antonino Manus	PwC
Faith Lawrence	Giz	Xhanti Payi	PwC
Kenny van Rooyen	Hall Longmore	Zimiti Chodeva	PwC
Dr Henry Roman	IWMI	Dominic Ramos	TIPS
Charl Viljoen	Johnson Tiles	Simanga Ngubane	Zestweg
Penwell Lunga	KAP	Bonang Mphahlele	Zestweg

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