



Consulting Engineers South Africa

ADVANCES IN WATER PURIFICATION AND DISTRIBUTION TECHNOLOGIES

Tumi Tsehlo, Group CEO, Dynamic Fluid Control 32 Lincoln Road, Industrial Sites, Benoni 24 October 2024

ABOUT DFC: KEY ORGANISATIONAL FACTS



Established in 1947



Customers in+150 countries





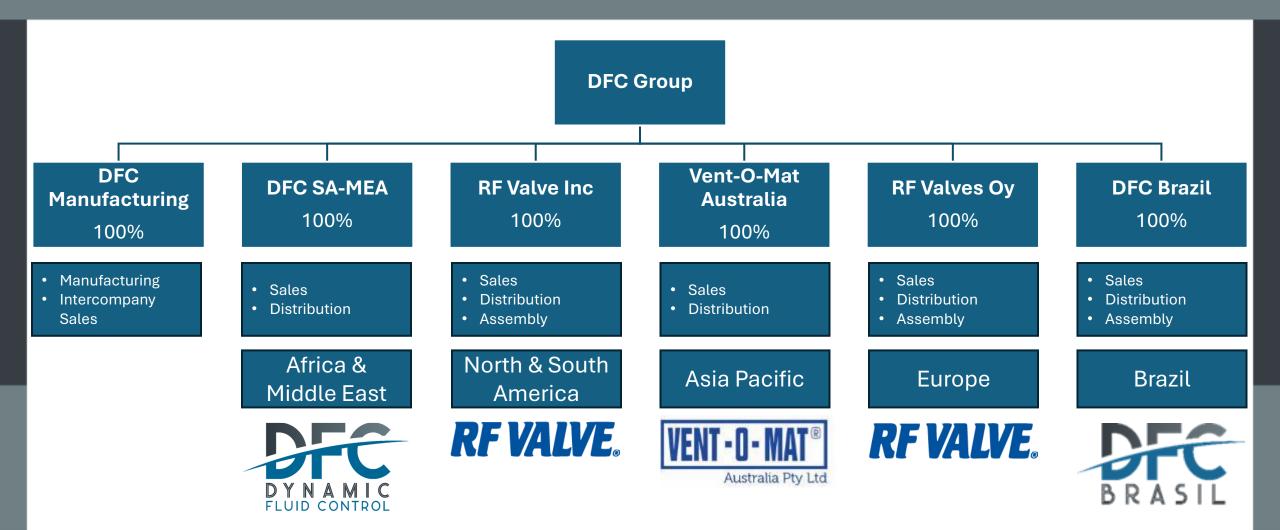


Largest SA owned industrial valve manufacturer South Africa (HQ), Australia, Brazil,

Finland, USA



DFC Group Structure





Introduction

- The average annual rainfall in South Africa is around 464 mm, which is relatively low compared to the global average of approximately 860 mm.
- South Africa is generally classified as a semi-arid country.





Introduction

- Regional Disparities
- Water Stress
- Seasonal Dependency









water & sanitation

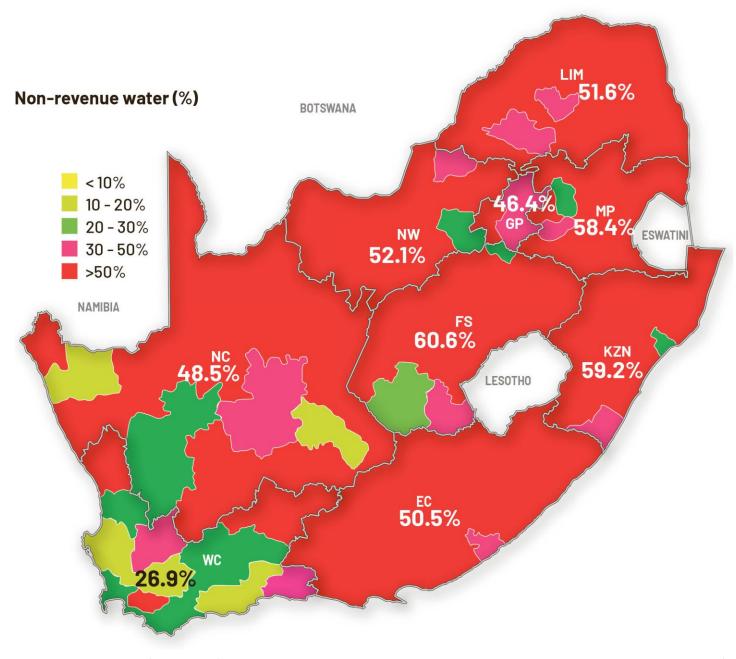
Department: Water and Sanitation REPUBLIC OF SOUTH AFRICA "Water is Life, Sanitation is Dignity"







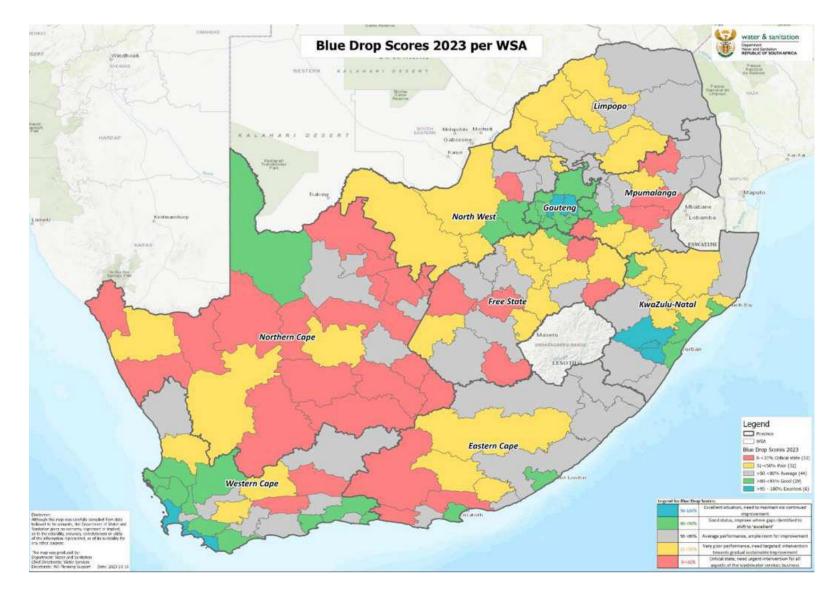
https://ws.dws.gov.za/iris/releases/BDN_2023_Report.pdf







https://www.dailymaverick.co.za/wp-content/uploads/2024/04/P4-non-revenue-water.jpg



- 144 WSAs & 958 systems audited
- 7 Water Boards & 23 WSPs
- 26 BD Certifications
- 277 Critical State systems



https://ws.dws.gov.za/iris/releases/BDN_2023_Report.pdf



CLIMATE CHANGE

URBANISATION

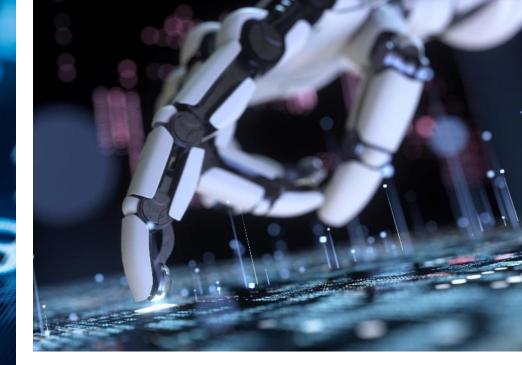
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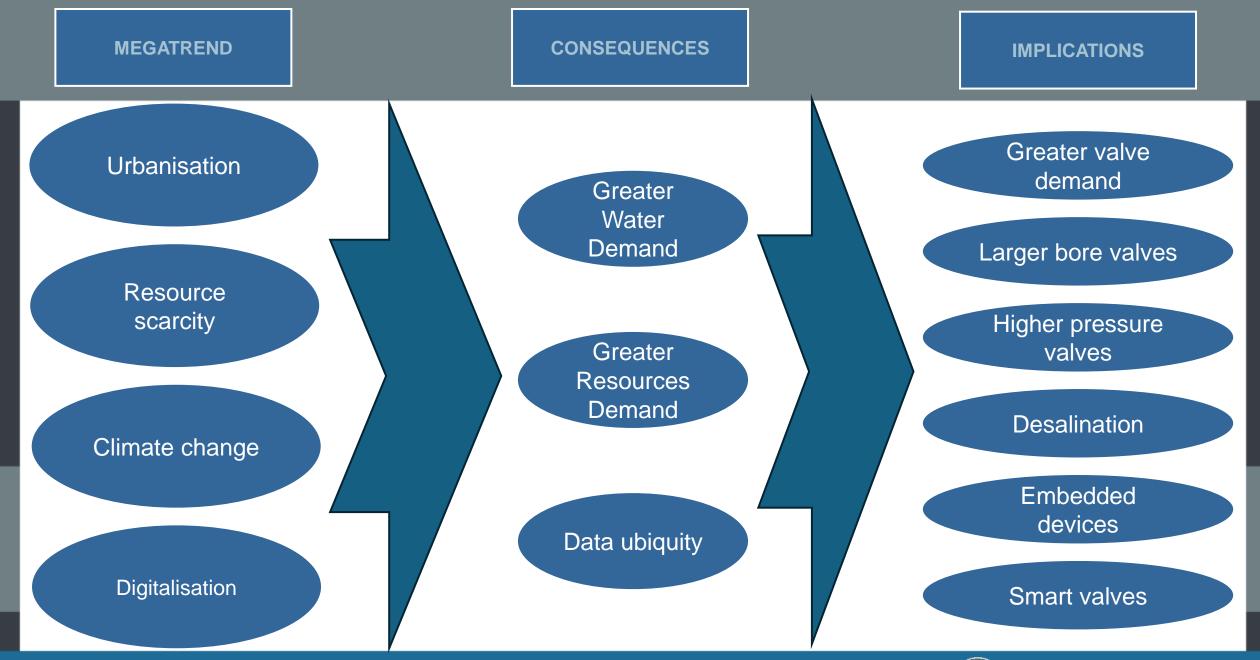
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DIGITALISATION









Impact of Top 10 Innovative Water Treatment Trends

Water Quality Monitoring $17~\%$	Carbon-based Purification $14~\%$	Desalination 11 %	Nanofiltration 7%
Membrane Technology 14%	Water Disinfection Solutions 13 %	Modular Water Treatment Systems	lloT
		Bio-based Water Remediation $10~\%$	2 % Energy-Efficient Integrations 2 %
This tree map illustrates the top 10 innovation trends & StortUs Copyright © 2023 StartUs Insights. All rights reserved becember 2023			



Source: https://www.startus-insights.com/innovators-guide/water-treatment-trends/



THE SOUTH AFRICAN WATER INNOVATION STORY

African Centre for a Green Economy



https://www.wrc.org.za/wp-content/uploads/mdocs/TT%20743%20web.pdf

