

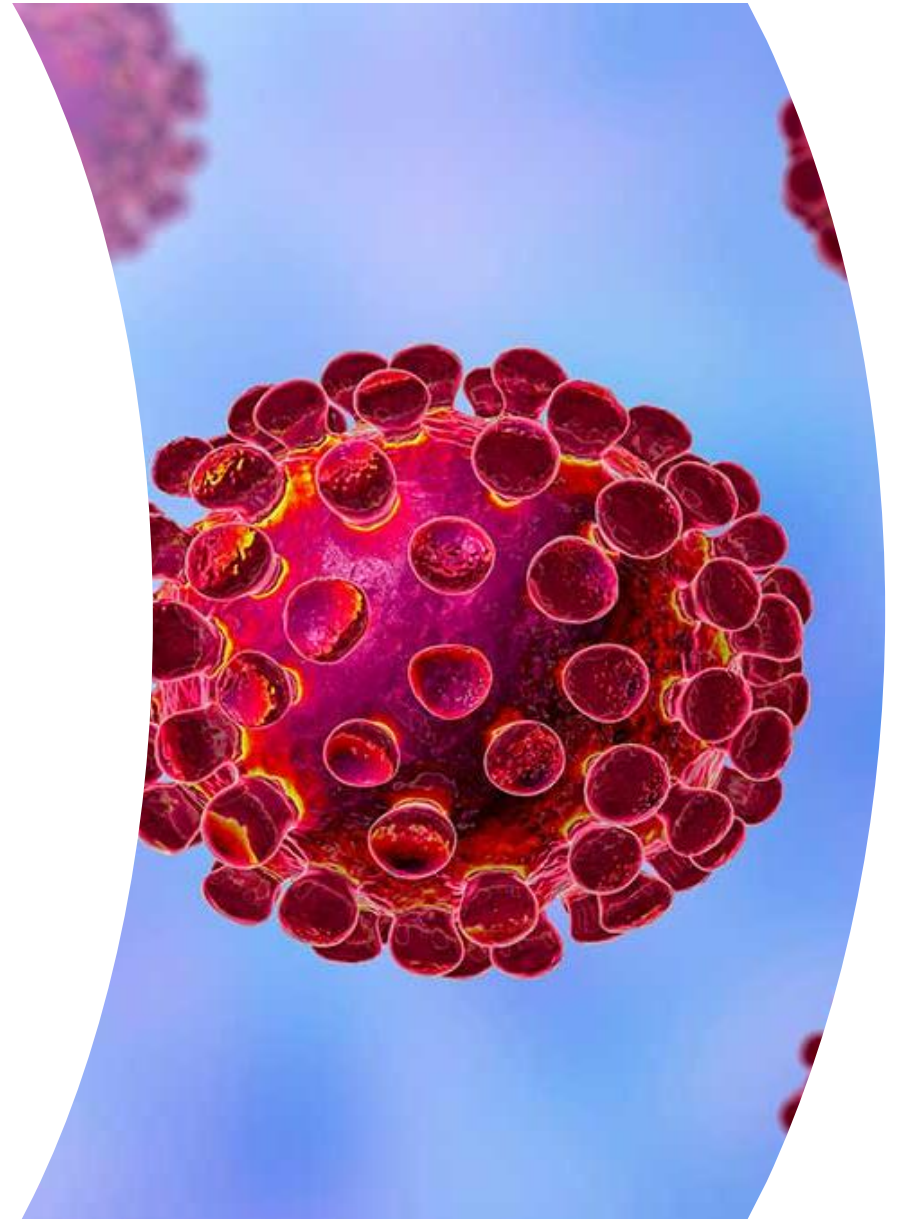
SIDSSA 2020

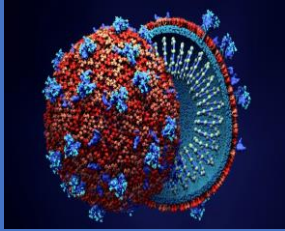
**NEW VISTAS ON  
HUMAN  
SETTLEMENTS,  
WATER AND  
SANITATION  
INFRASTRUCTURE**

*Dhesigen Naidoo*



**WATER  
RESEARCH  
COMMISSION**





COVID 19



# Redefining our view of the world

WRC 2020

## BUSINESS MAVERICK

**BUSINESS MAVERICK OP-ED**

### SA needs a robust water resilience strategy amid ratings downgrades and Covid-19

By Dhesigen Naidoo and Xhanti Payi • 7  
April 2020

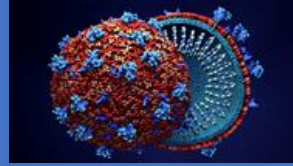


📷 Water levels at the Vaal Dam on 29 October 2019. I...

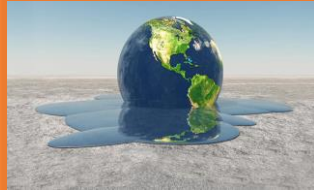


# A Nexus of Catastrophe

Covid 19 Pandemic



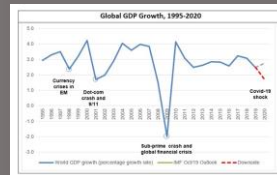
Climate Crisis



Broken Multilateral System & Trade Wars

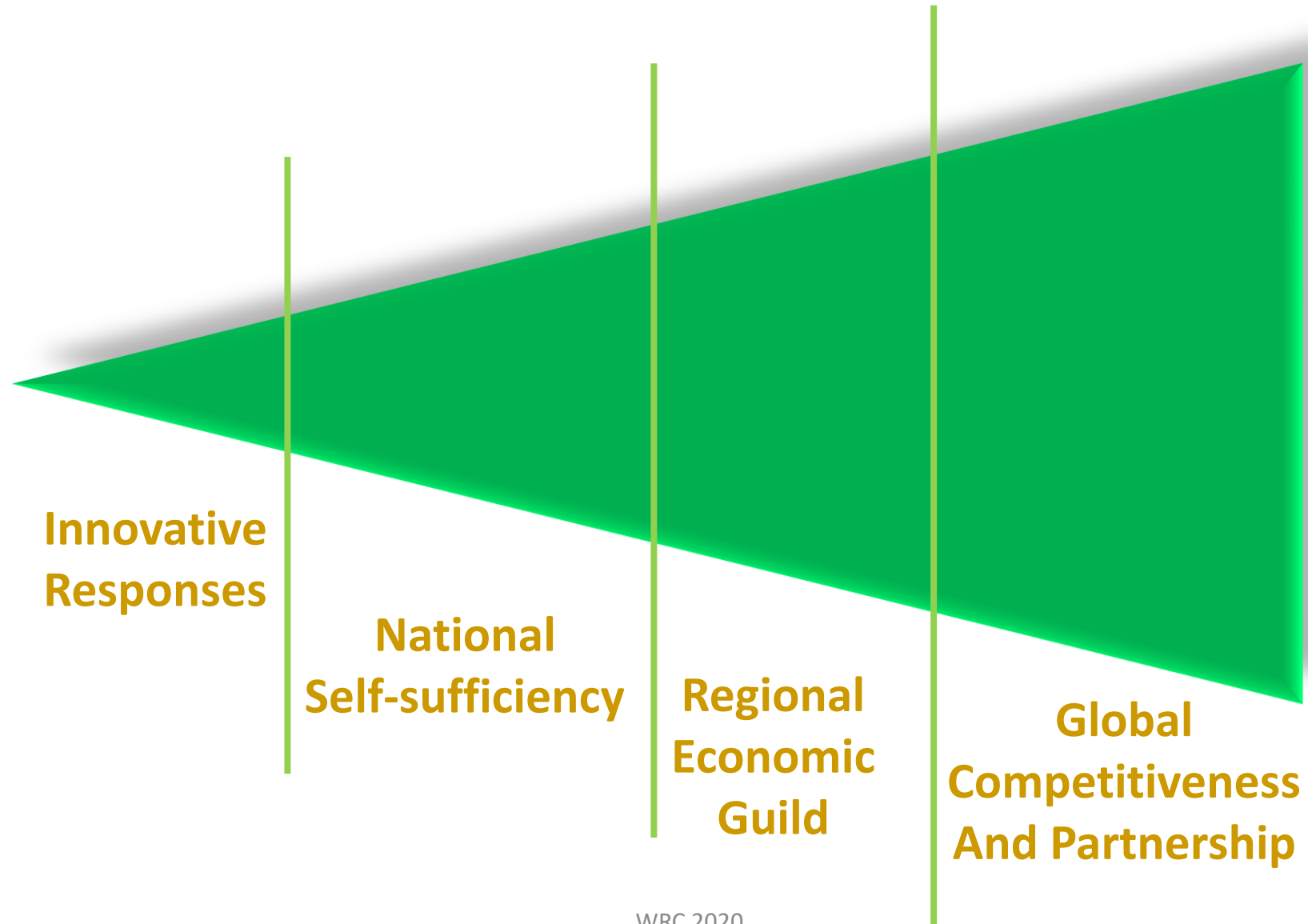


Economic Constraints



WRC 2020

# Exploring the Cone of Opportunity



# ***Water Innovation improving Human Settlements***

**Water Quality  
& Environment**

**4IR Water  
Management**

**New Water Taps  
(Supply  
diversification)**

**New  
Sanitation**

**Sustainable  
Human  
Settlements (*urban  
and rural*)**

**WEF**

**Smart  
Wastewater  
Treatment**

**Water Sensitive Design  
(WSD)**

SA's innovation  
assets can lead  
industrialisation  
and global  
competitiveness





SA's innovation  
assets can lead  
industrialisation  
and global  
competitiveness  
**This is also the  
Eureka Moment  
for Youth  
Leadership**



SECTION B: ISSUING OF THE SOUTH AFRICAN NATIONAL STANDARDS

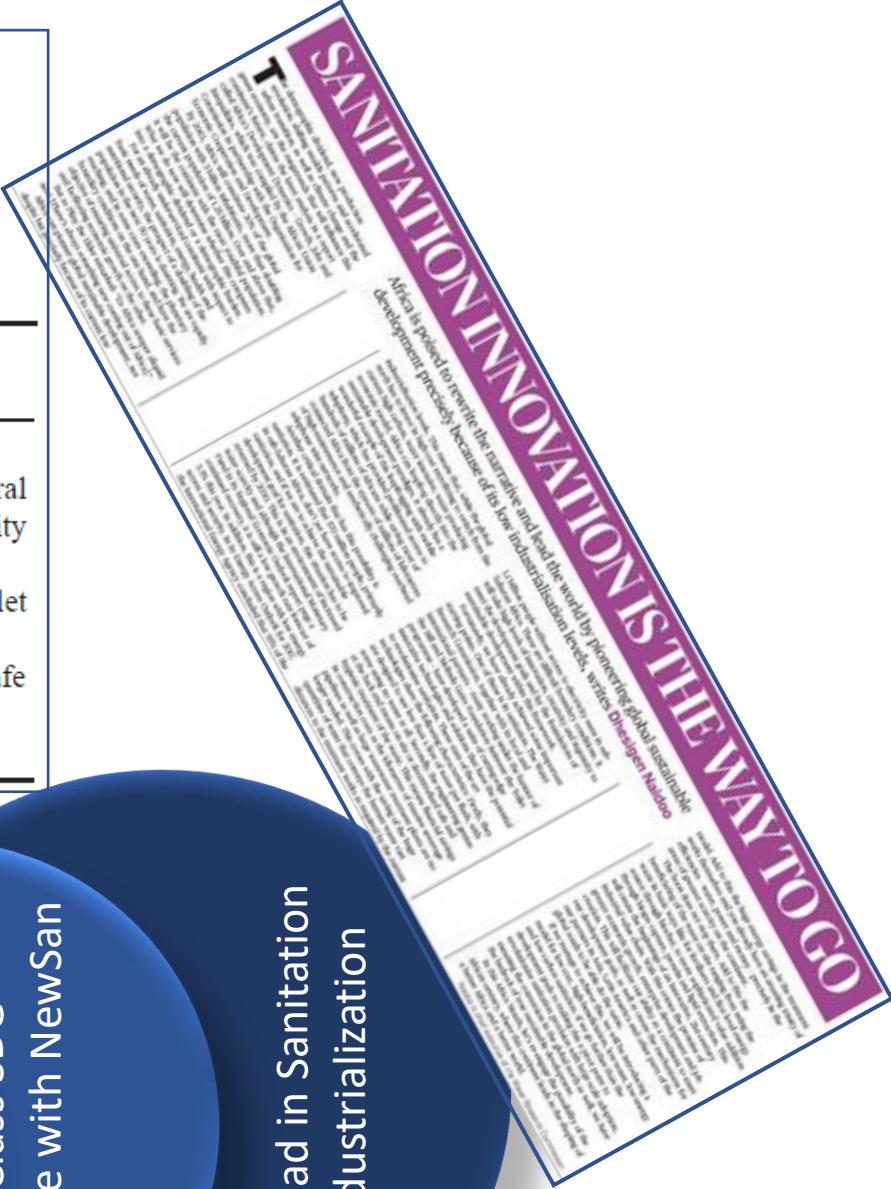
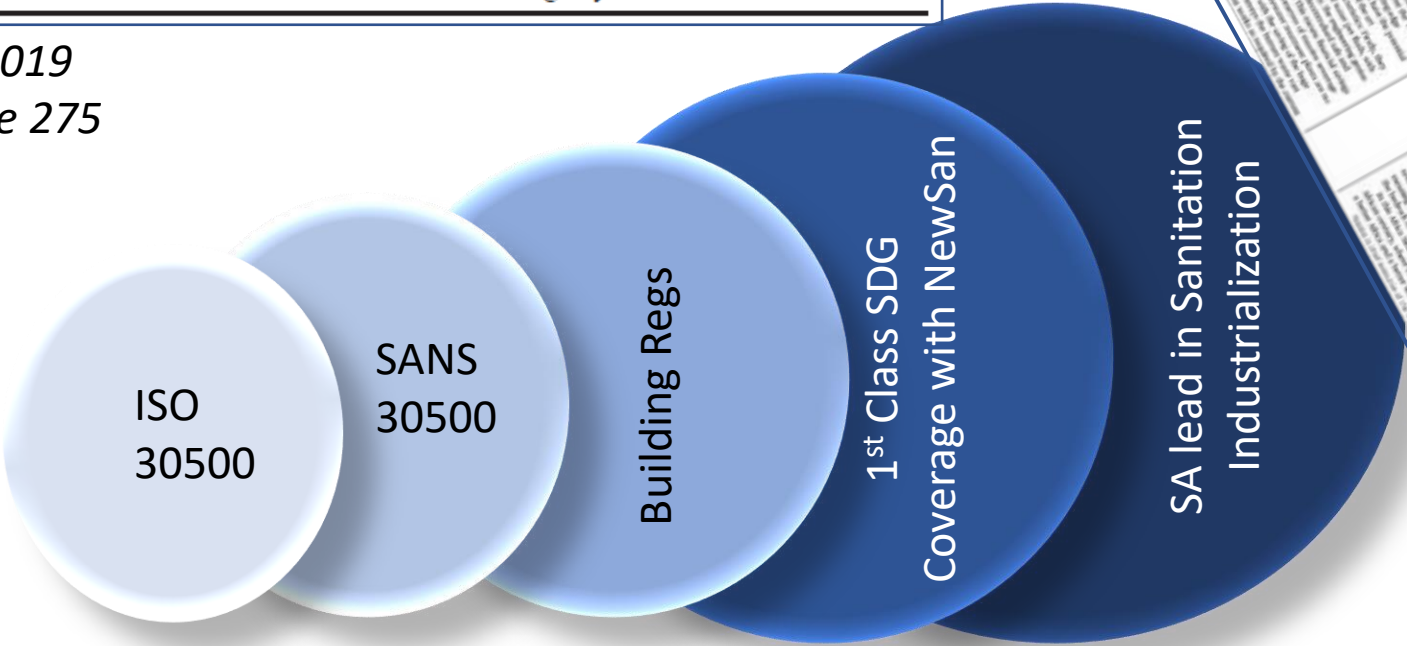
SCHEDULE B.1: NEW STANDARDS

The following standards have been issued in terms of section 24(1)(a) of the Standards Act.

Standard No. and year	Title, scope and purport
SANS 30500:2019 Ed 1	<i>Non-sewered sanitation systems — Prefabricated integrated treatment units — General safety and performance requirements for design and testing.</i> Specifies general safety and performance requirements for design and testing as well as sustainability considerations for non-sewered sanitation systems (NSSS). A NSSS, for the purposes of this document, is a prefabricated integrated treatment unit, comprising frontend (toilet facility) and backend (treatment facility) components that a) collects, conveys, and fully treats the specific input within the system, to allow for safe reuse or disposal of the generated solid, liquid, and gaseous output, and b) is not connected to a networked sewer or networked drainage systems..

17 May 2019  
DTI Notice 275

A quiet revolution:  
*Innovation led  
Industrialization*





## 1. Proof of Concept

- Established sampling program & protocol
- Preliminary sample analysis
- Established sewershed sampling profile

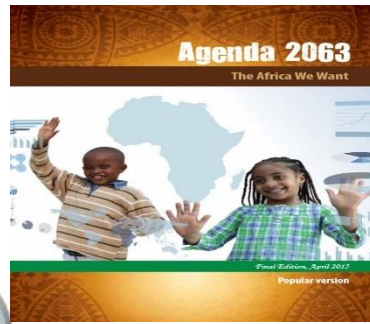
## 2. Pilot Scale Monitoring

- Established monitoring partnerships covering provincial hot spots
- Preliminary pilot surveillance monitoring data

## 3. National Wastewater Surveillance

- Rolled out national surveillance
- National data analysis and integration
- GIS mapping – heat maps
- National communication

# Stage Gated



Chapter 4

Grounded in Innovation





The power  
of knowledge  
to the people

