



**By 2030 eThekweni will be Africa's
most caring and liveable city**



eThekweni Water and Sanitation

Climate Change and Climate Resilience

1. To improve and enhance water management and sanitation for enhanced adaptive capacity.
2. To integrate climate change considerations into short, medium and long-term water and sanitation planning processes
3. To develop appropriate adaptation measures to maximise water security and resource protection under changing climate conditions
4. To enhance internal capacity and provide resources for improved resilience to climate change impacts.
5. To increase awareness of and build capacity on climate change issues.
6. To ensure inter-linked climate and hydrological scenario projections representative of the complex inter-related natural systems.

1. How is climate change expected to impact upon your sector, and Can you provide examples where such impacts are already being observed?

The provision of water and sanitation services is vulnerable to many aspects of climate change

- **Impact of floods**

- Pipelines are washed away and services are interrupted
- Dams silt up and storage is reduced
- Treatment Works and pumpstation are damaged impacting the environment and water supply

1. How is climate change expected to impact upon your sector, and Can you provide examples where such impacts are already being observed?

- **Impact of drought**

- Dams are designed to cater for 2 to 3 years of poor rainfall. Beyond this water restrictions are introduced
- Water restrictions decrease the revenue to the Municipality
- Water restrictions impact residents and business
- Droughts impact investor confidence and tourism

- NWRS-3 Vision: “The protection and management of water resources to enable equitable and sustainable access to water and sanitation services in support of socio-economic growth and development for the well-being of current and future generations.”

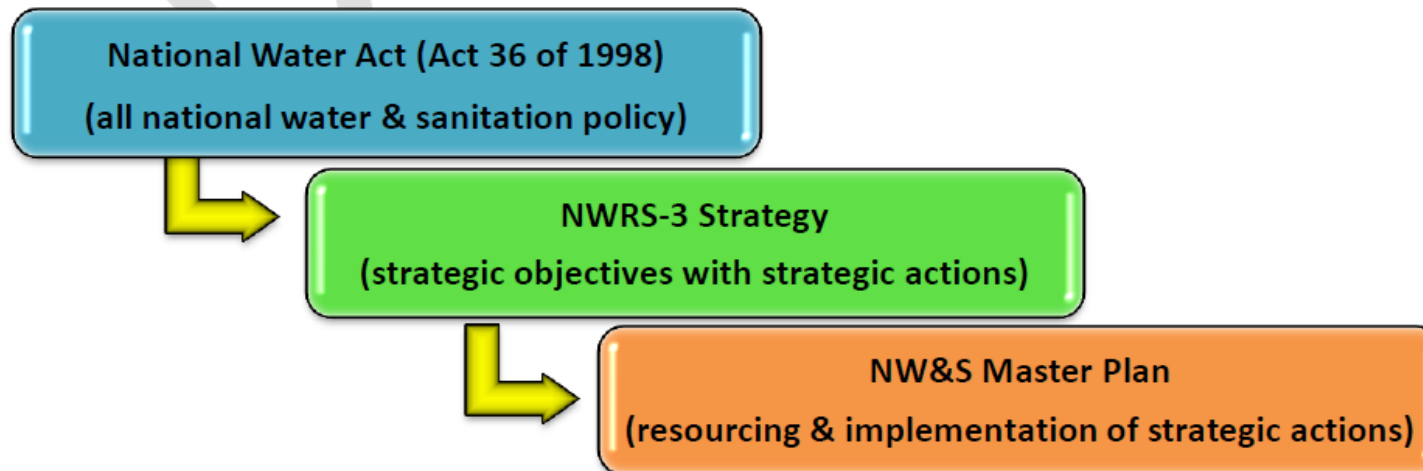


Figure 1: Relationship between NWA, NWRS-3 and MW&SMP

2. Provide an overview of how your sector is addressing climate change and any challenges you are experiencing.

- **Addressing Climate Change**

- EWS Climate change strategy (2017)
 - New schemes, Alternate supplies, Water Demand Management, Strategic stock, Asset management Plans,
- Business continuity, contingency plans and disaster response plans
- Relocate vulnerable infrastructure
- Reduce carbon footprint – energy efficient equipment and green energy projects (Gas to energy, hydro-power, solar energy,
- Build Back Better
- Revised infrastructure design criteria

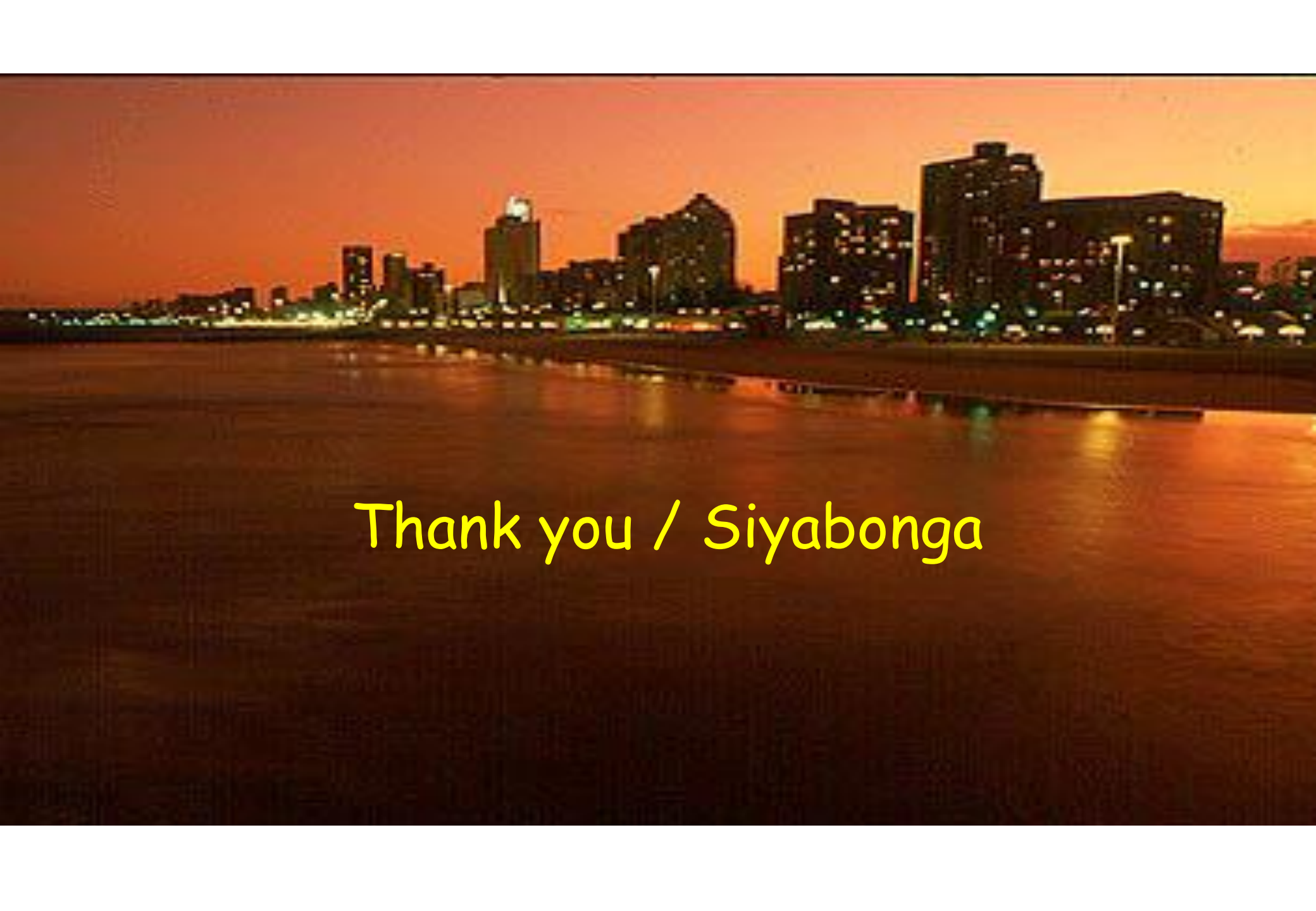
2. Provide an overview of how your sector is addressing climate change and any challenges you are experiencing.

- **Challenges we experience**

- Increasing storm intensities and frequencies
- Ability to respond quickly in a disaster situation that is compliant
- Abuse and vandalism of Council Infrastructure
- Competing priorities on available budget
- Catchment management
- Rural to urban migration

3. Describe budgetary commitments made that address climate change challenges identified above.

- The water and sanitation 3 year budget is R5bn and many projects within this have a climate change theme
 - New reservoirs, treatment works, pipelines, pumpstations will improve resilience
- The City pays our bulk water provider Umgeni Water approximately R4bn per annum for water and they have a capital build programme of R17bn over the next 5 years
- Additionally, the City introduced an Infrastructure Levy in 2022 that will raise R750m. This is dedicated to upgrading the M&E plant
- PPP Contracts are being utilised for water reuse and energy generation

A nighttime photograph of a city skyline across a body of water. The sky is a deep orange and red, suggesting sunset or sunrise. The city lights are visible, with several tall buildings and a dense cluster of lights along the waterfront. The lights are reflected in the calm water in the foreground. The text "Thank you / Siyabonga" is overlaid in the center of the image in a yellow, sans-serif font.

Thank you / Siyabonga