

Water sector opportunities

26 March 2018



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WATER SCARCITY AS THE 'NEW NORMAL'



Constantia Pick n Pay, March 2018

FOUR AREAS OF POSSIBLE INTEREST FROM CITY:

The City was requested to speak on:

- Water Dept's new technology evaluation committee and process
- Update of City's current 2010 Water Bylaw and key proposed changes & additions which signify opportunities for private sector
- City's guidelines for alternative water installations
- City's updated Water Star Rating Certification which recognizes local business excellence.

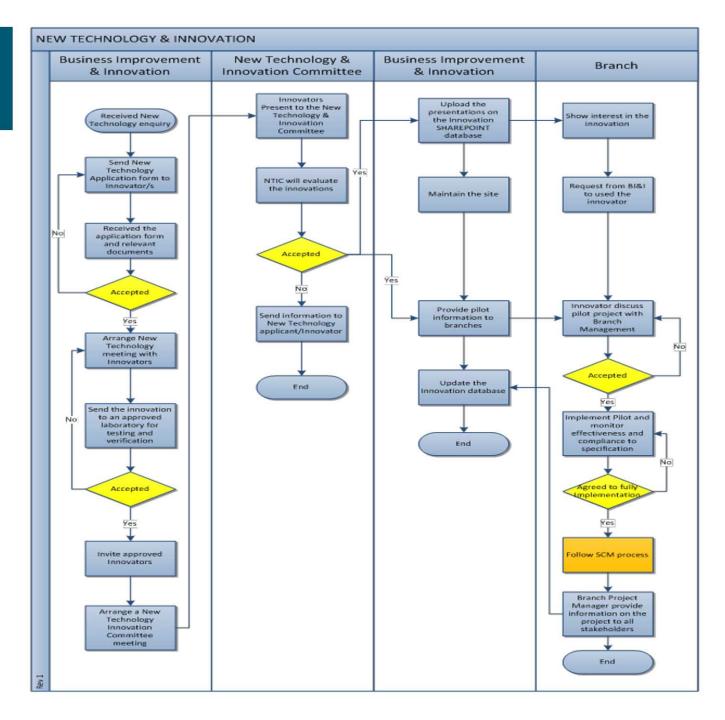
NEW TECHNOLOGY EVALUATION COMMITTEE & PROCESS



Procurement route

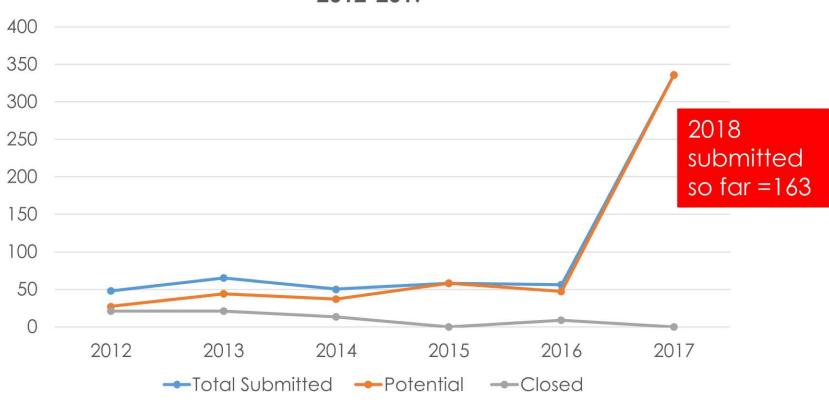
Not all technologies and services are procured by City, but may be shared with consumers

Some innovations are policy or process related and have no procurement aspect

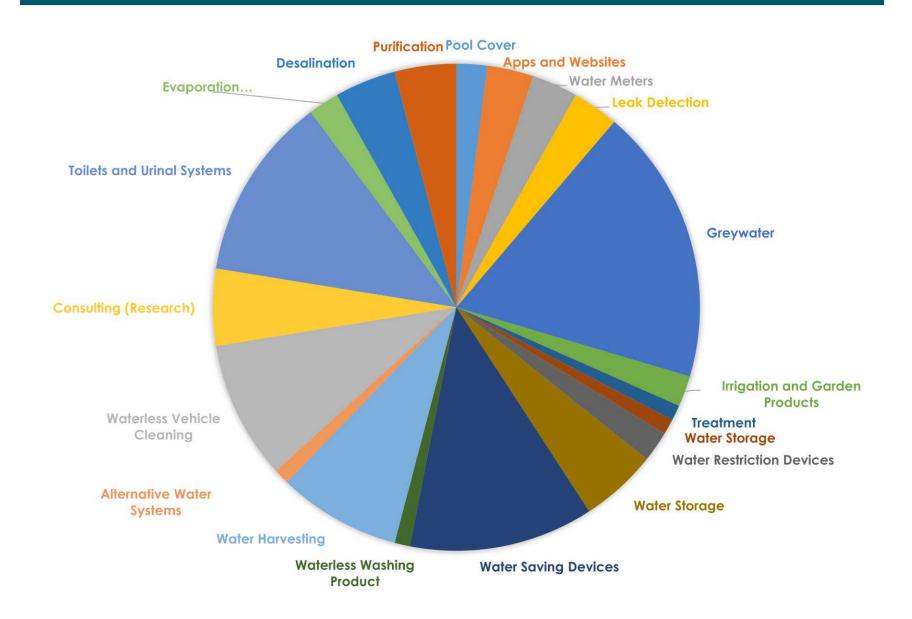


PROPOSALS SUBMITTED TO THE NT PLATFORM TO DATE

Proposals submitted to the New Technologies platform 2012-2017



NEW TECHNOLOGIES SPLIT PER CATEGORY



UPDATE OF 2010 WATER BY-LAW – IN PROCESS

Some key **proposed** provisions that are changed for clarity and new additions

- **Section 28 (20)** The by-law clarifies that the City will install one Council approved meter and that it is incumbent upon a property owner to install a sub-meter/s. This is applicable to both commercial and residential multi-unit properties.
- Schedule 1 Water closet cisterns may not exceed 6 litres in capacity- previously 9 litres.
- **Section 42 (6)** All new developments and building renovations must provide for the installation of alternative water systems for no-domestic purposes and full details thereof must accompany the building plans.
- Section 42 (7) The owner must notify the City when plumbing components including
 alternative water fittings as prescribed in this by-law have been installed or changed.
- **Section 56 (5) A-C** Households and business are allowed to go off the municipal water grid for **non-domestic** purposes. Permission from the Director: Water and Sanitation must be obtained when an alternative water installation for non-domestic use is connected to the municipal water installation. The Director will enter into agreements with such entities and maintain a register thereof.
- Section 45(3) Where a property is supplied with both potable drinking water and water derived from alternative water sources, an industry-approved mechanism to prevent backflow will be required. An example of this is a reduced pressure zone (RPZ)valve. Reference to treated effluent was replaced with alternative water sources.

PUBLIC PARTICIPATION COMMENT PROCESS

- Public comment period was in December 2017 and January 2018.
 Over 43 000 comments are being processed, due to an online petition which was created.
- Amendments to the By-Law are still under consideration

ALTERNATIVE WATER PRINCIPLES

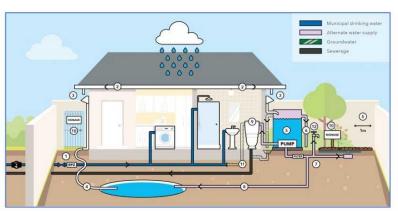
- Quality required for different uses as per 1996 national guidelines.
- Applications & licensing required for groundwater, surface water & treated effluent.
- Imperative to prevent potentially dangerous alternative water from contaminating drinking water system on the premises and surrounding area. Reduced Pressure Zone (RPZ) valve back-flow preventer is mandatory.
- Discharge to correct place overflow to stormwater or to sewer if any harmful chemicals or substances
- Colour code the pipes
- Put up the official 'Do not drink' warning signage on City's website

For **Summary Guidelines for Installing Alternative Water Systems** and application info see: http://cct.gov.za/bC2nV

As per current 2010 Water Bylaw, no alternative water for drinking, cooking and ablution unless contracted as a Water Service Intermediary/ Provider.







WATER STAR RATING CERTIFICATION

- To encourage businesses to comply with water related by-laws, and provide public recognition for local excellence.
- Started in 2016, with pilot of 19 businesses
- An award ceremony to launch the initiative and present the certificates
- Updated now in 2018, based on lessons learnt from pilot and drought context.



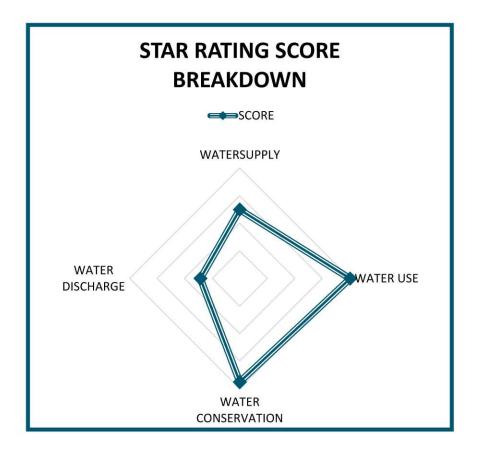
SUMMARY OF ASSESSMENT

- Based on relevant legislation and best practice guidelines for water management.
- "Compliance" questions relate to legislative requirements.
- "Star" questions for best practice and water conservation measures.
- Assessment of 4 categories:
 - Water Source,
 - Water Use,
 - Water Conservation, and
 - Water Discharge.
- Rating from 1 to 5 stars.

STARS AWARDED	ASSESSMENT RESULTS	
0	Non-Compliance	
1	Compliance (Legal)	
2	50-59% of Star points	
3	60-69% of Star points	
4	70-79% of Star points	
5	80% and above	

SUMMARY OF RESULTS – STAR RATING BREAKDOWN

EXAMPLE



	SCORE	
WATERSUPPLY	50%	
WATER USE	80%	
WATER CONSERVATION	75%	
WATER DISCHARGE	29%	

	POINTS	
	AVAILABLE	SCORE
WATERSUPPLY	4	2
WATER USE	5	4
WATER CONSERVATION	12	9
WATER DISCHARGE	7	2



WATER STAR RATING CERTIFICATION

- The assessment:
 - ✓ Able to assess water-use practices across wide spectrum of industry types and sizes.
 - Provides a good benchmark for any company, whether monitoring and best practice has been implemented or not.
 - ✓ Identifies areas where a company needs to focus.
 - ✓ Potential savings can be identified, particularly in those companies where no monitoring or water-wise practices are implemented.
 - Assists the City in understanding all aspects of a business's water management in a holistic manner and does not focus on just one aspect e.g. potable water use.
 - ✓ Consolidates a wide range of information into one document.



ENKOSI DANKIE THANK YOU

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