

SALGA – NBI SESSION

1 MARCH 2019

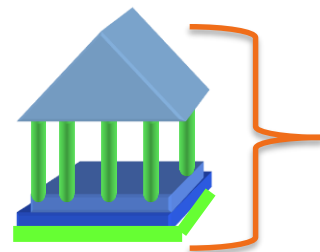
KOPANO YA METSI: MUNICIPAL WASTEWATER TREATMENT AND REUSE ROUND TABLE



OBJECTIVES OF THE PRESENTATION

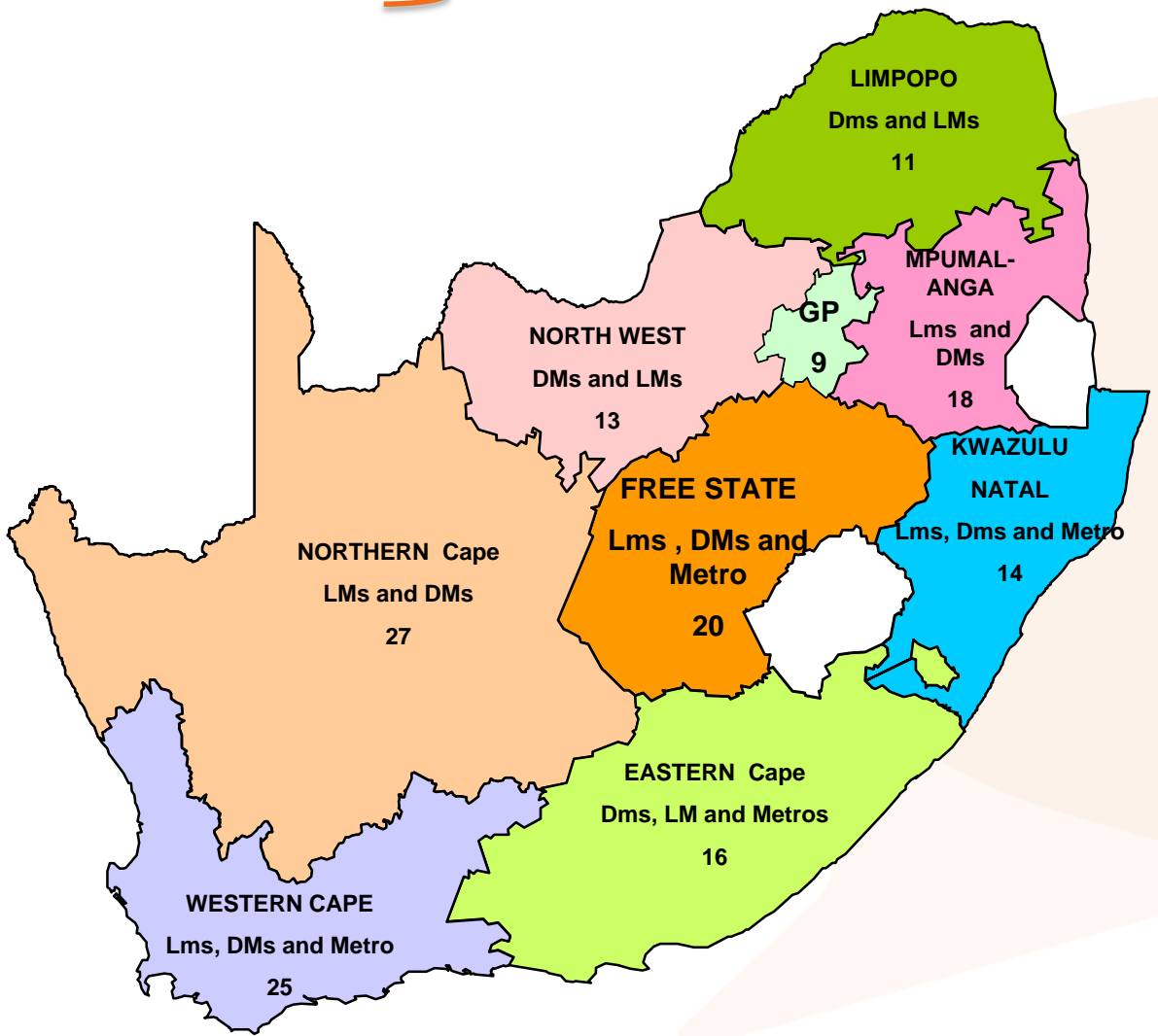
- ❑ Our Role and Mandate
- ❑ State of Affairs
- ❑ The deepen our institutional delivery model of wastewater management and Re-use
- ❑ Highlight opportunities
- ❑ Recommendations

257 Munics
8 metros
44 DMs
205 LMs



19Years

SOUTH AFRICAN MUNICIPALITIES

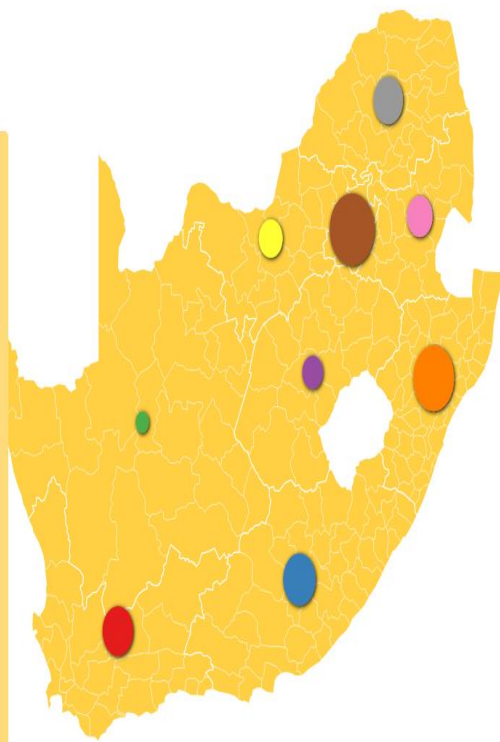


COMMUNITY SURVEY 2016

Provincial Municipal

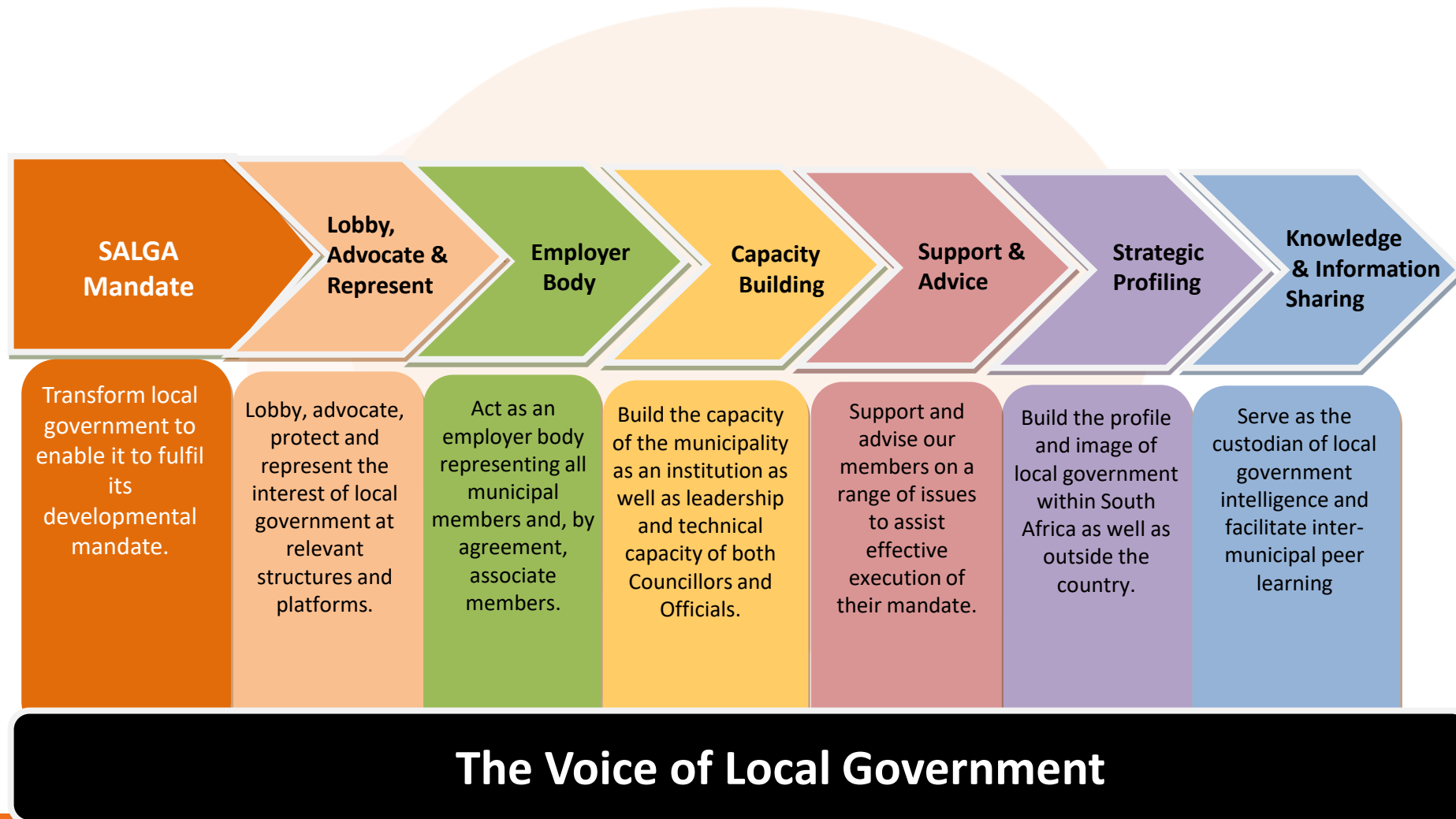
Population

GAUTENG	13.4M	
KWAZULU-NATAL	11.1M	
EASTERN CAPE	7.0M	
WESTERN CAPE	6.3M	
LIMPOPO	5.8M	
MPUMALANGA	4.3M	
NORTH WEST	3.7M	
FREE STATE	2.8M	
NORTHERN CAPE	1.2M	



The South Africa I know, the home I understand

SALGA MANDATE



Examples Infrastructure managed by Local Government

– ranges from:

The good



The Bad



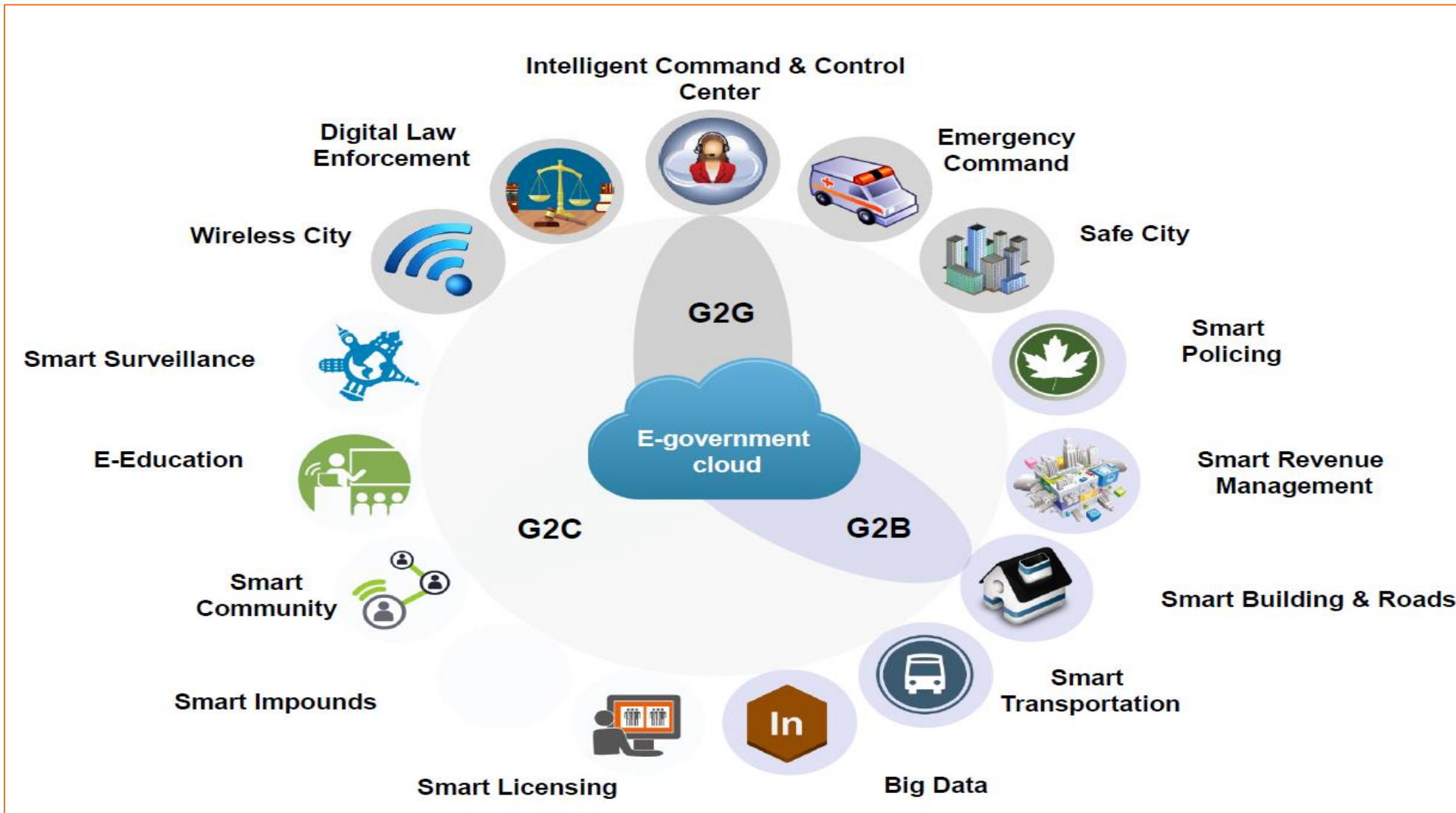
The Ugly



Sanitation Urban: C- The condition and functionality of sanitation infrastructure is of grave concern, especially outside the major urban areas. Although the unserved-households percentage has decreased significantly since 1994, due to growth in population and households, the actual number unserved remains at about 4 million. 'Green Drop' performance scores are generally in the “good” to “excellent” range around major urban areas. **However, many urban facilities are unable to cope with increased demand. Many (up to 30% of all) WWTWs are in critical condition, discharging increasing quantities of untreated waste into streams.**

Sanitation other areas: E The **skills required to operate and manage sophisticated sanitation and WWTW technologies are often scarce outside of major urban centres;** consequently downstream users and ecosystems are subjected to high pathogen loads and eutrophication, and endure higher treatment costs to achieve potable water standards. Inhabitants in some rural areas still do not have access to safe sanitation. Pit toilets in rural and informal areas are frequently under-serviced, exposing residents to disease. (Note: The grading for “all other areas” in 2011 ought to have been an E, and that grade remains.)

SALGA's Smart Cities Framework



Status of Facilities in SA

Province	#WWTW/P rov	Design Capacity (MI/d)	# of WSAs with ADs	# of WWTWs with ADs	Total # of ADs	DesCap of WWTW with ADs (MI/d)	Flow to WWTWs with ADs (MI/d)	Total AD volume (MI)
MP	76	322	4	8	11	55	58	15
NW	37	290	4	6	12	144	114	21
FS	93	401	6	10	51	192	163	38
GP	58	2573	8	35	222	2479	2263	882
KZN	141	1085	8	21	56	692	532	89
LP	58	187	3	7	30	80	76	40
WC	158	1025	7	11	26	313	217	52
NC	79	139	3	4	10	80	48	18
EC	124	489	3	6	12	89	68	13
SA-total	824	6511	46	108	430	4124	3539	1167

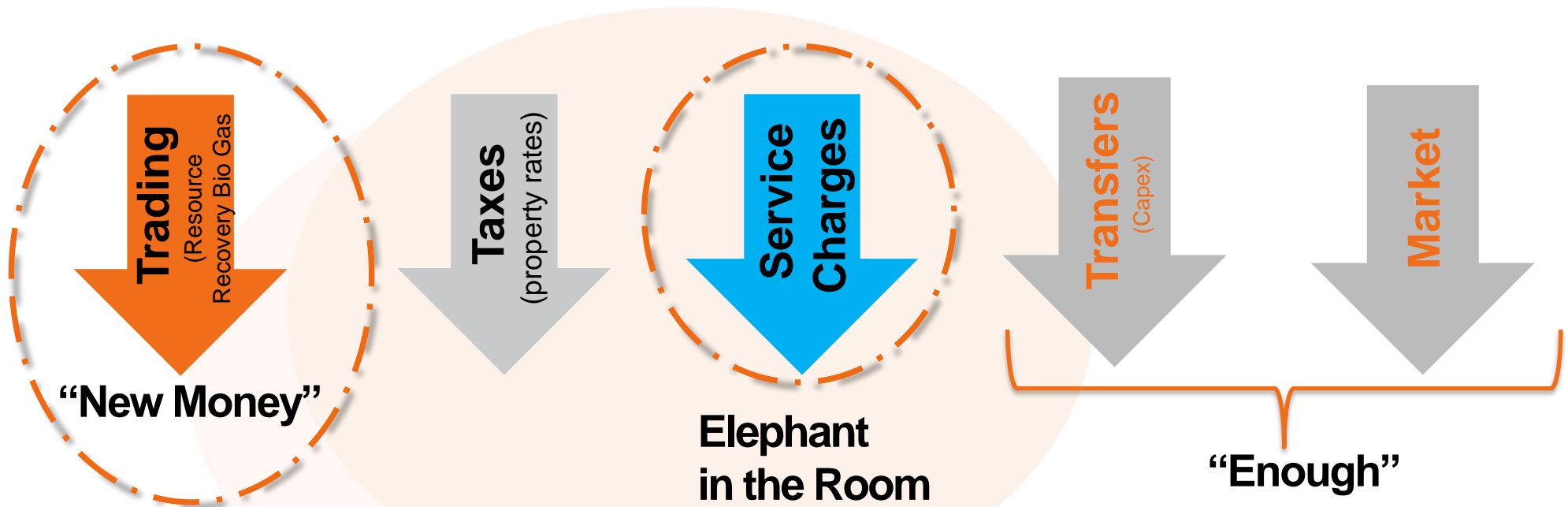
ACID MINE WATER SOURCE OF “NEW WATER”

“New” Water Resources Development
to be competency of the Department



Acid Mine Water

Funding mix for social and economic infrastructure (4Ts + M)



Infrastructure Development and Management including operations and maintenance

Financial Performance – Debtors and Creditors per S71 as at 30th June 2017

- ❑ Municipal debt continues to grow; exacerbated by the culture of non-payment.
- ❑ Debtors at R128.4 billion is greater than the total LG grant allocation of R111 billion
 - Households - R83 billion
 - Commercial – R27 billion
 - Organs of state – R7.4 billion

Collection Rate Indicator as at 30 June 2017

< 50	50 - 59	60 - 69	70 - 79	80 - 94	>= 95	Unknown
44	19	24	28	48	78	16

Note that the government debt reported by municipalities have not been verified by the respective government departments

- ❑ Municipalities owe creditors significant amounts that threaten the livelihood of these suppliers amounting to R43 billion
 - Bulk electricity – R16 billion
 - Bulk water – R6.8 billion
 - Trade creditors R 11.9 billion

PROJECT APPROACH

- Project Value and Complexity
- Economic vs Social Infrastructure
- National vs Regionalisation vs Local Infrastructure Approach



INFRASTRUCTURE DEVELOPMENT APPROACH

Comparing Alternative Service Delivery Options

Procurement Alternatives

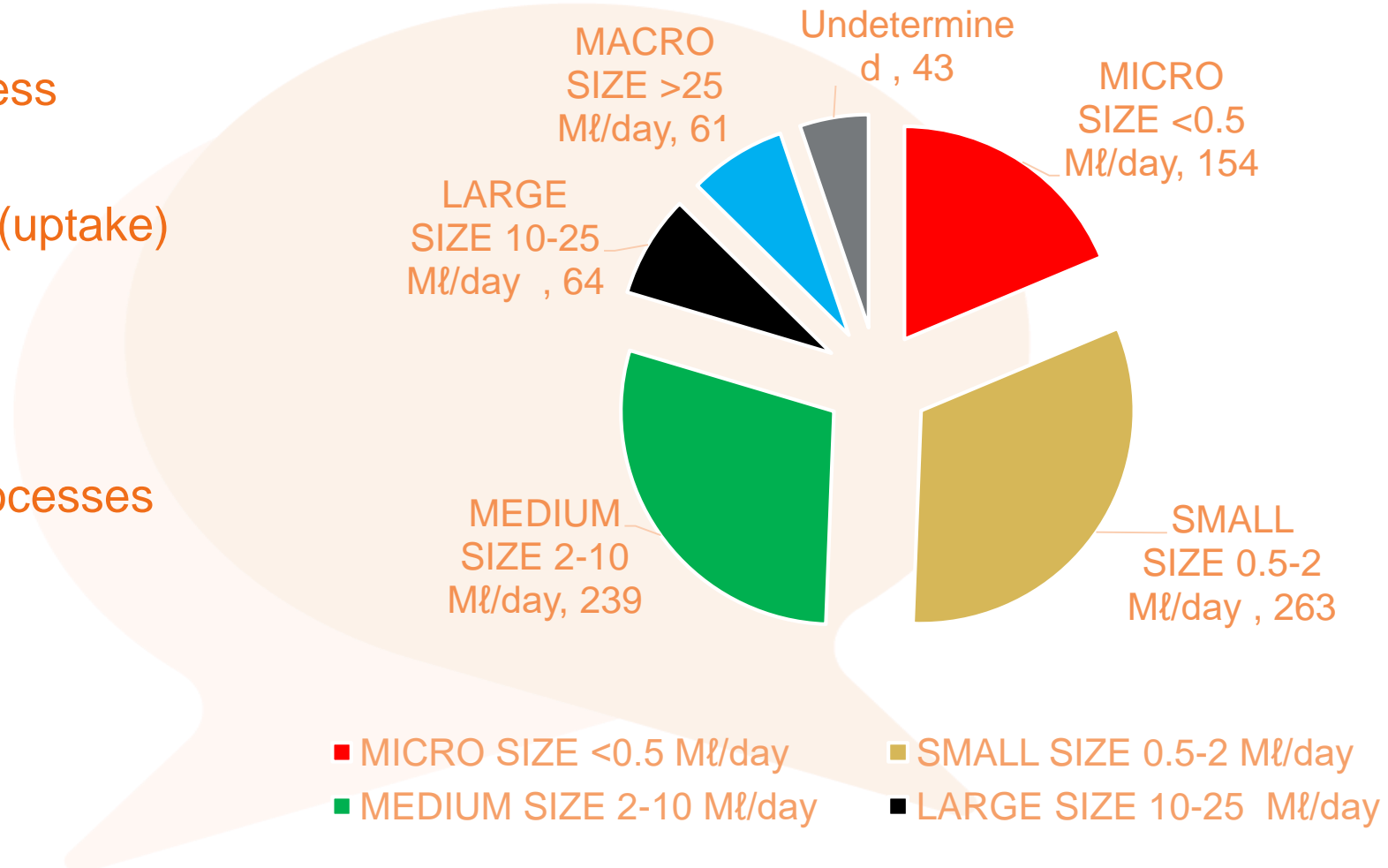
Option	Asset Ownership	Operations and Maintenance	Capital Investment	Commercial Risk	Duration
Service Contract	Public	Public and Private	Public	Public	1-2 Years
Management Contract	Public	Private	Public	Public	3.5 Years
Lease	Public	Private	Public	Shared	8-15 Years
Concession	Public	Private	Private	Private	25-30 Years
BOT/BOO	Private and Public	Private	Private	Private	20-30Years
Divestiture	Private or Private and Public	Private	Private	Private	Indefinite (may be limited by license)

- National Water Resources and Services Authority
- Construction Unit of the Department of Water and Sanitation
- Water Boards
- Municipal Multi Jurisdictional – Minister of COGTA may request municipalities to establish such in consultation with functional area Minister

➤ 824 WWTWs

We have the facilities

- ☐ Regulatory process
- ☐ Create Demand (uptake)
- ☐ Finance
- ☐ Procurement Processes
- ☐ Delivery Model
- ☐ Sustainability



RECOMMENDATIONS

- ❑ Quantify demand for re – use and energy
- ❑ Intensify “New Water” development given the water security challenges
- ❑ Approach National Treasury for a procurement reform process
- ❑ Collaborate with funders to explore opportunities for project funding
- ❑ Develop a project prospectus

THANK YOU

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**WATER RESILIENT
CITIES**
LEARNING EVENT

SAVE *the* DATE
18-19 MARCH 2019
SUN SQUARE CAPE TOWN
CITY BOWL, 23 BUITENGRACHT
STREET, CAPE TOWN.