

The Use of SDG 6 Policy Support System, (SDG-PSS)

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WATER IS LIFE - SANITATION IS DIGNITY



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA

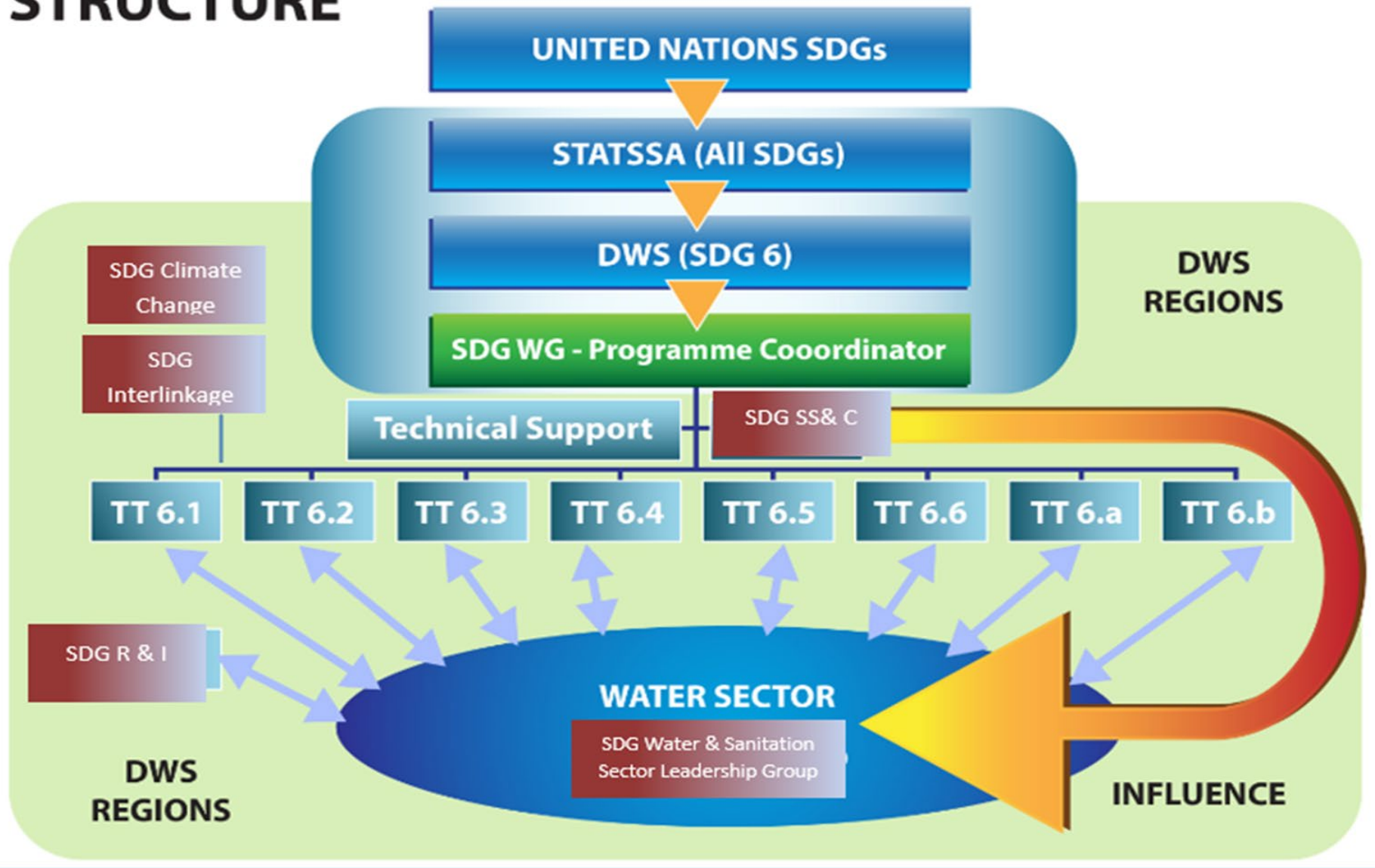


OVERALL STATUS OF SDG 6 AT THE NATIONAL LEVEL



- 60 Million People
- Average annual rainfall in South Africa is about 464 mm, with the Western Cape getting the majority of its rainfall in winter (June to August) and the rest of the country receiving summer (December to February) rainfall.
- South Africa is the 30th driest country in the world
- Per capita consumption is approximately 237 l/c/d compared with the world average consumption of approximately 173 l/c/d
- 45% Avg Non Revenue Water

STRUCTURE



- Water and Sanitation Sector Leadership Group
- Sector Support and Coordination
- Research & Innovation
- SDG Interlinkage
- Climate Change



8 x SDG6 TARGETS

SA Initiative - Cross Cutting Task Teams

South African Perspective on the use of SDG-PSS

NW&SMP PHILOSOPHY

INSTRUMENTS

- ✓ National Water and Sanitation Master Plan
- ✓ Water Security Framework
- ✓ Municipal Finance Management Act
- ✓ Public Finance Management Act
- ✓ National Environmental Management: Protected Areas Act



Affordable and reliable access to sufficient and safe water and hygienic sanitation for socio-economic well-being with due regards to the environment

!
Without improved revenue generation from transfers and tariffs and a reduction in costs, the sector will be unsustainable

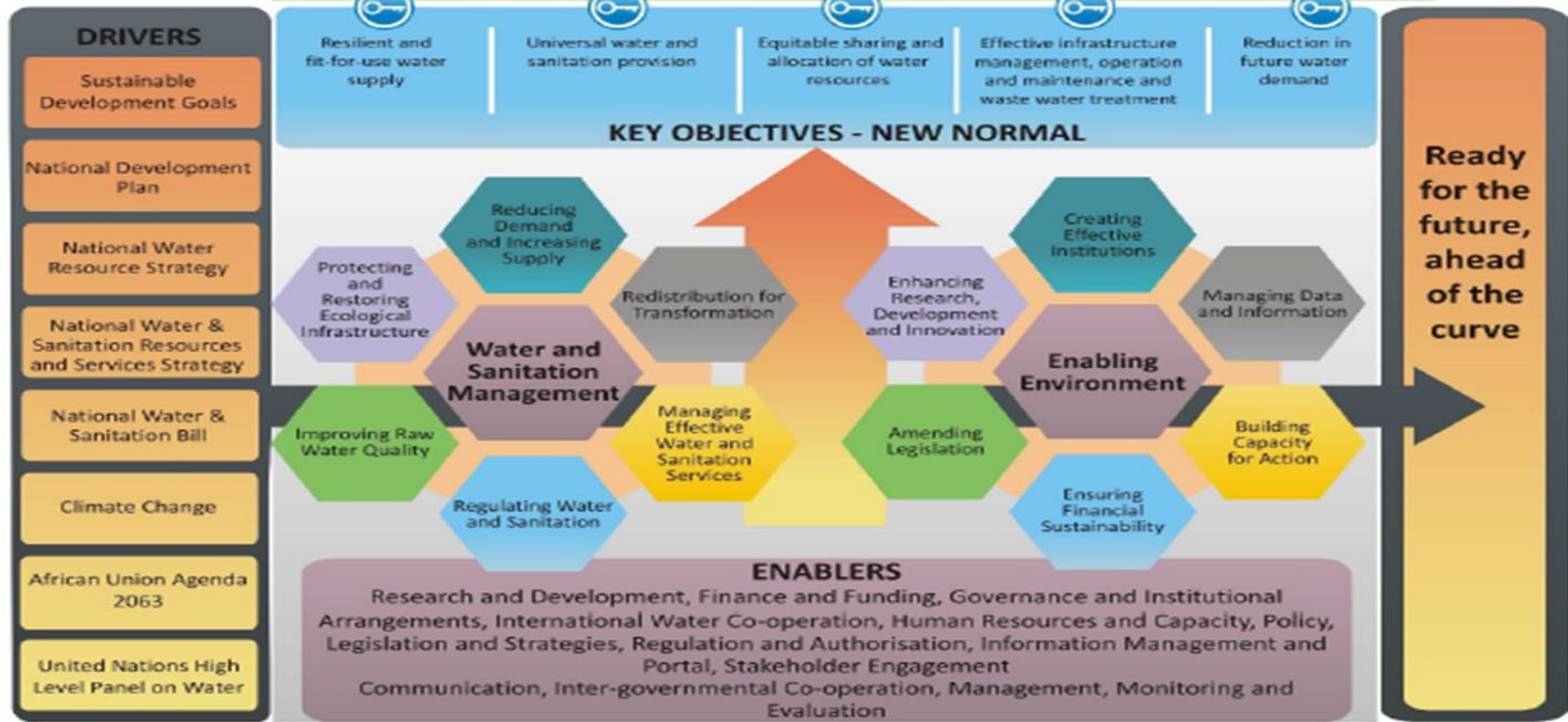
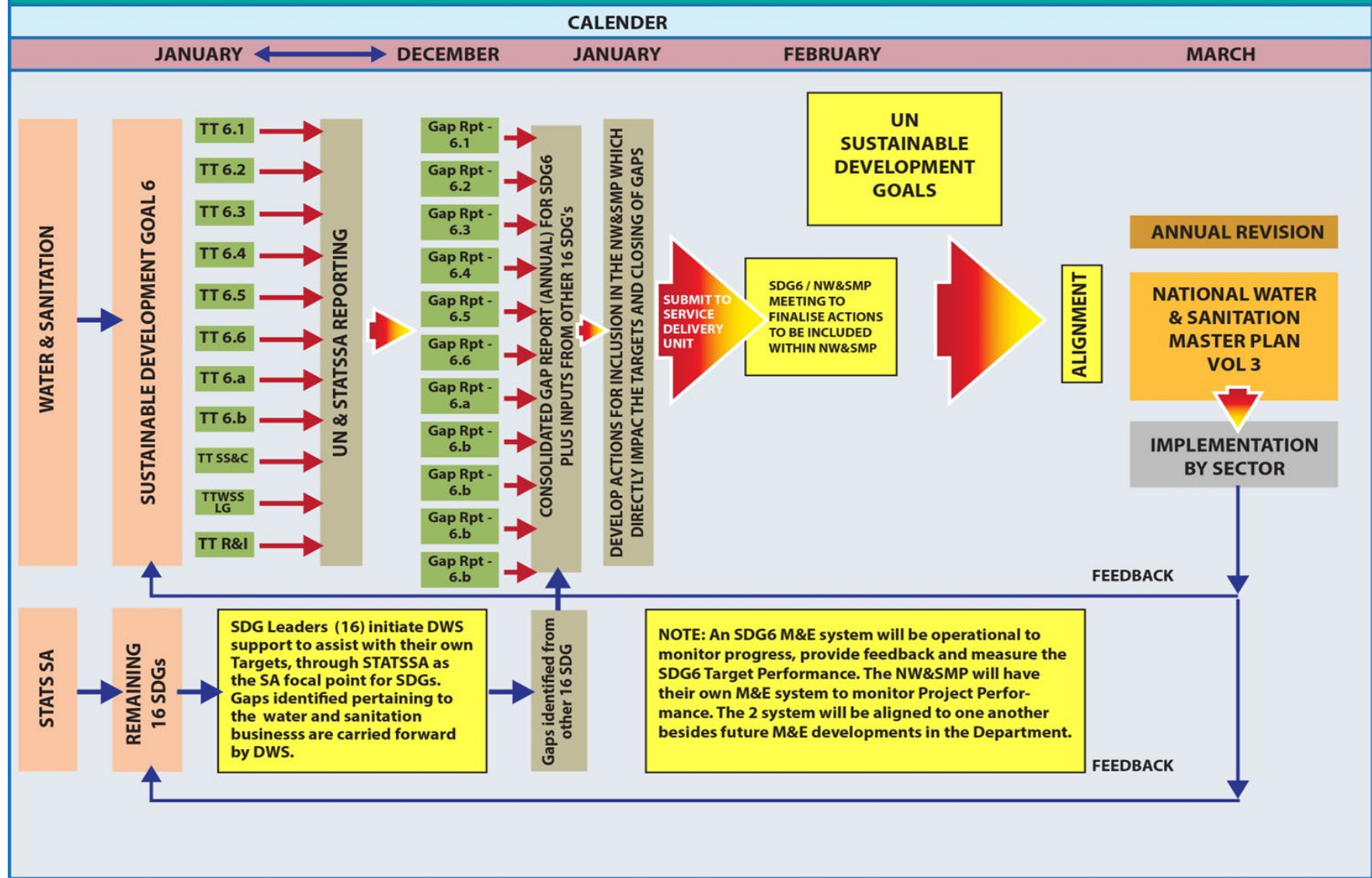


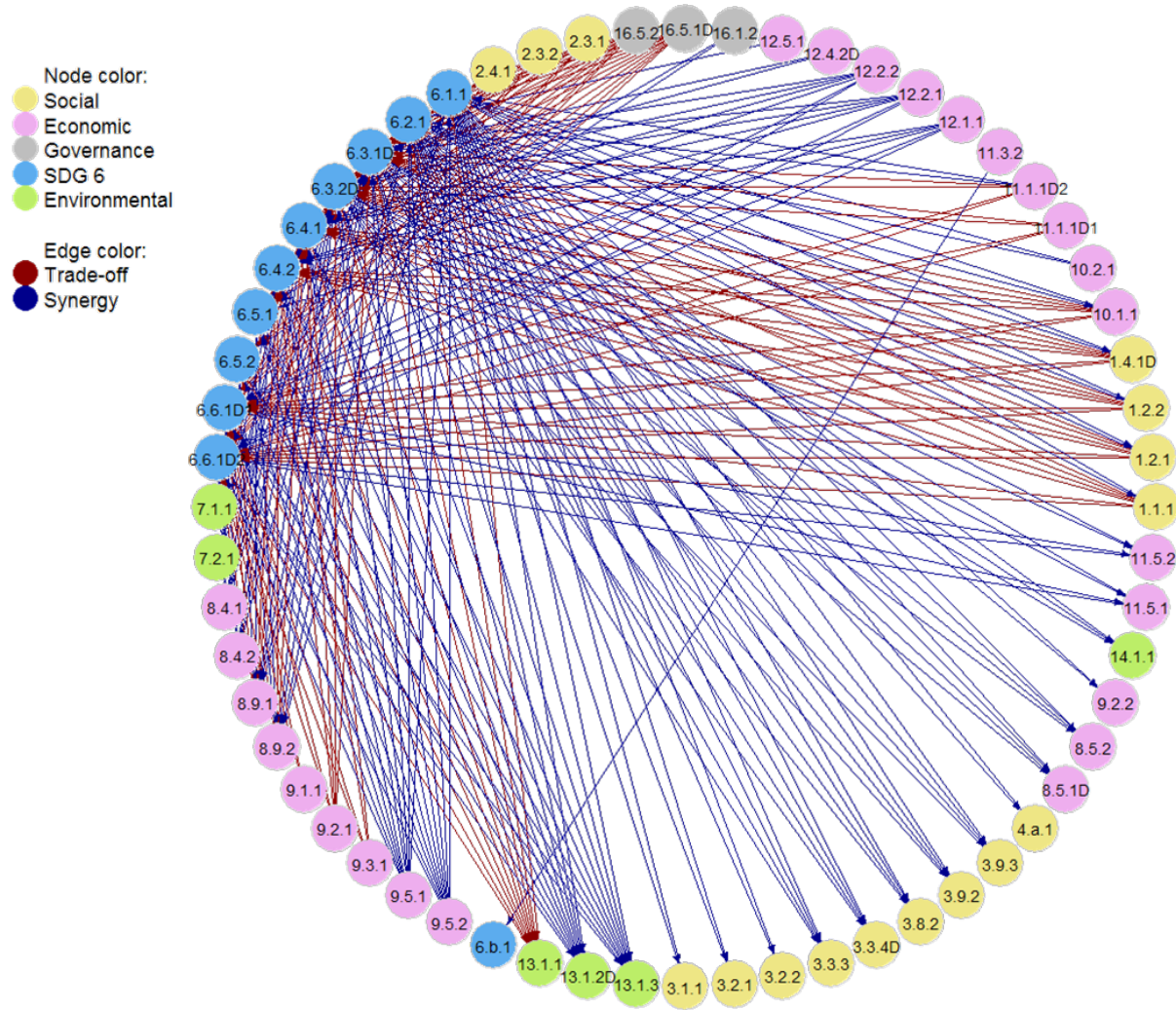
DIAGRAM SHOWING THE INTERFACE BETWEEN THE SDG PROGRAMME AND THE NW&SMP



SDG 6 INTERLINKAGE WITH OTHER 16 SDGs

- WRC project:
- Mapping water and sanitation interlinkages across the SDGs

SDG Operational Performance of other Govt institutions is our challenge



DATA GATHERING (2023)

- SDG Indicators 6.3.2 on Ambient Water Quality (Thembi Masilela) ; (Arrived 26 April 23. Due 1 Oct 23)
- Integrated Water Resources Management 6.5.1 (Patrick Mlilo) ; (Arrived 17 April 23. Due 1 Oct 23)
- SDG indicator 6.5.2 on transboundary water cooperation (Patrick Mlilo) ; (Arrived 17 March 23. Due 30 June 23)
- Tracking the extent that various freshwater ecosystems are changing over time 6.6.1 (Lebo Betty Matlala) ; (Arrived 2 May 23. Due 31 July 23)



TARGET 6.1, 6.2 AND 6.3 PROGRESS



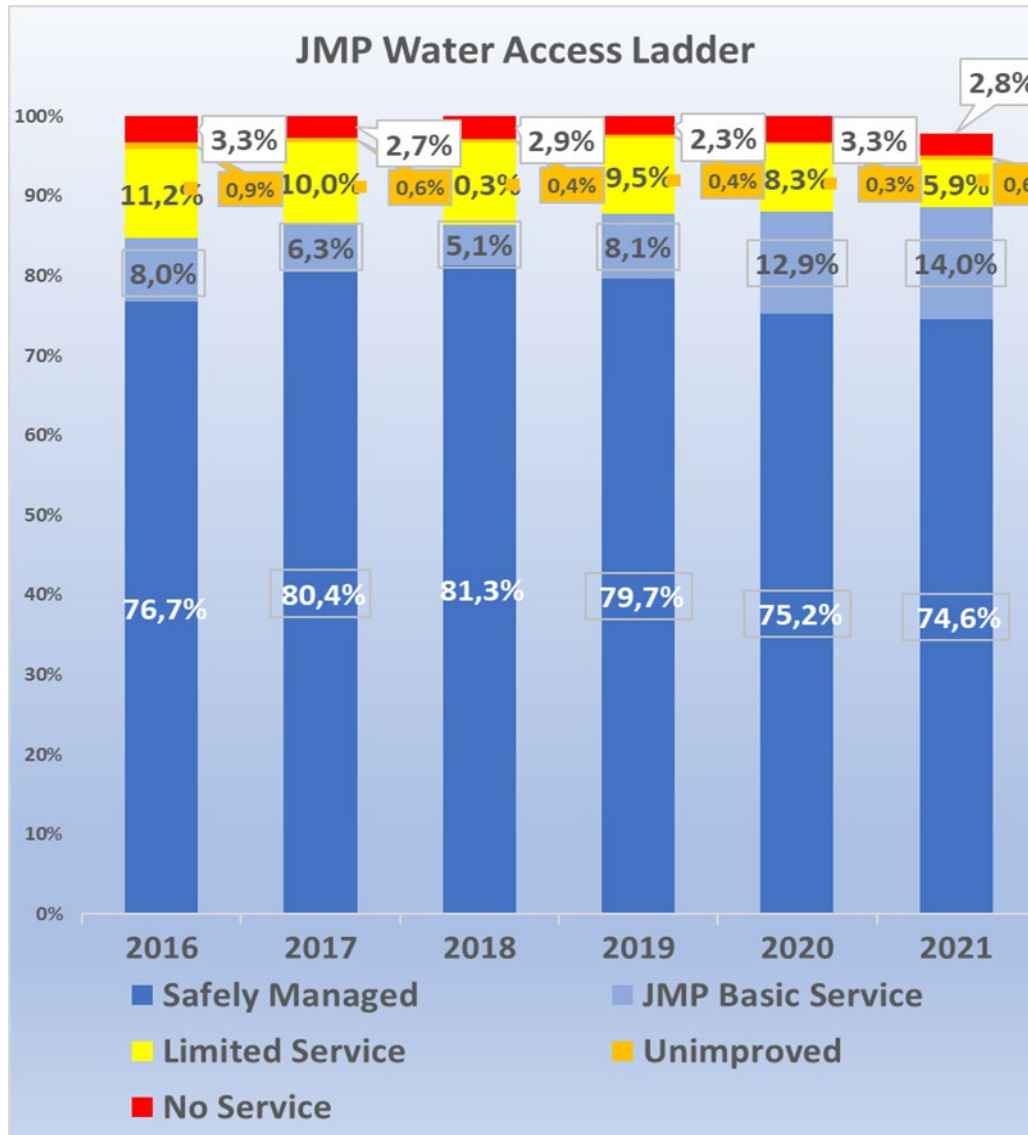
CONTEXT: JMP DEFINITIONS FOR SDG ATTAINMENT

	Service Level	Definition
WATER	Safely managed	Drinking water from an improved water source which is located on premises, available when needed and free of faecal and priority contamination
	Basic	Drinking water from an improved source provided collection time is not more than 30 minutes for a roundtrip including queuing
	Limited	Drinking water from an improved source where collection time exceeds over 30 minutes for a roundtrip to collect water, including queuing
	Unimproved	Drinking water from an unprotected dug well or unprotected spring
	No service	Drinking water collected directly from a river, dam, lake, pond, stream, canal or irrigation channel
SANITATION	Safely managed	Use of improved facilities that are not shared with other households and where excreta are safely disposed of <i>in situ</i> or transported and treated off-site
	Basic	Use of improved facilities that are not shared with other households
	Limited	Use of improved facilities that are shared with other households
	Unimproved	Use of pit latrines without a slab or platform, hanging latrines or bucket latrines
	Open defecation	Disposal of human faces in fields, forests, bushes, open bodies of water, beaches and other open spaces, or with solid waste
Note: Improved facilities include flush/pour to piped sewer systems, septic tanks or pit latrines, ventilated improved pits latrines, composting toilets or latrines with slabs		

South African Perspective on the use of SDG-PSS

SDG 6.1 - ACCESS TO CLEAN DRINKING WATER

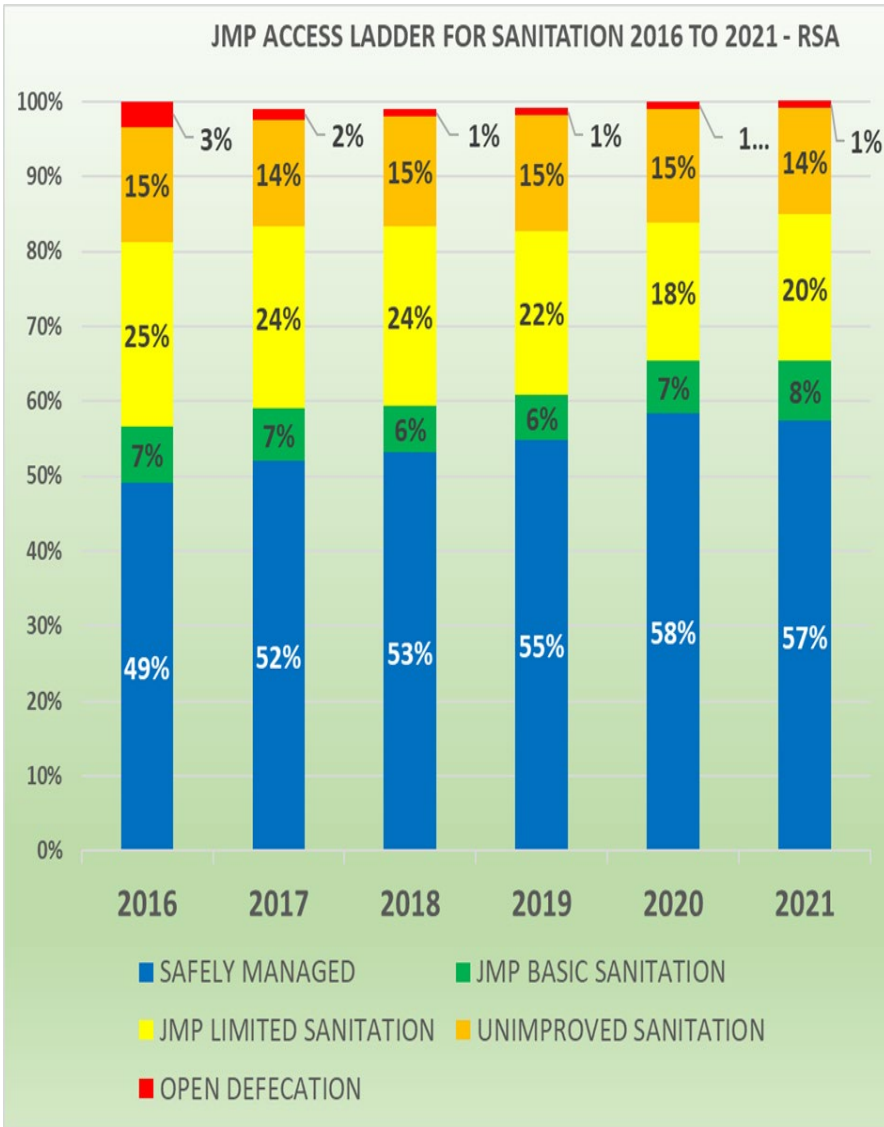
JMP Water Access Ladder



	2016	2017	2018	2019	2020	2021
Safely Managed	76,7%	80,4%	81,3%	79,7%	75,2%	74,6%
JMP Basic Service	8,0%	6,3%	5,1%	8,1%	12,9%	14,0%
Limited Service	11,2%	10,0%	10,3%	9,5%	8,3%	5,9%
Unimproved	0,9%	0,6%	0,4%	0,4%	0,3%	0,6%
No Service	3,3%	2,7%	2,9%	2,3%	3,3%	2,8%



SDG 6.2 – ACCESS TO SAFELY MANAGED SANITATION

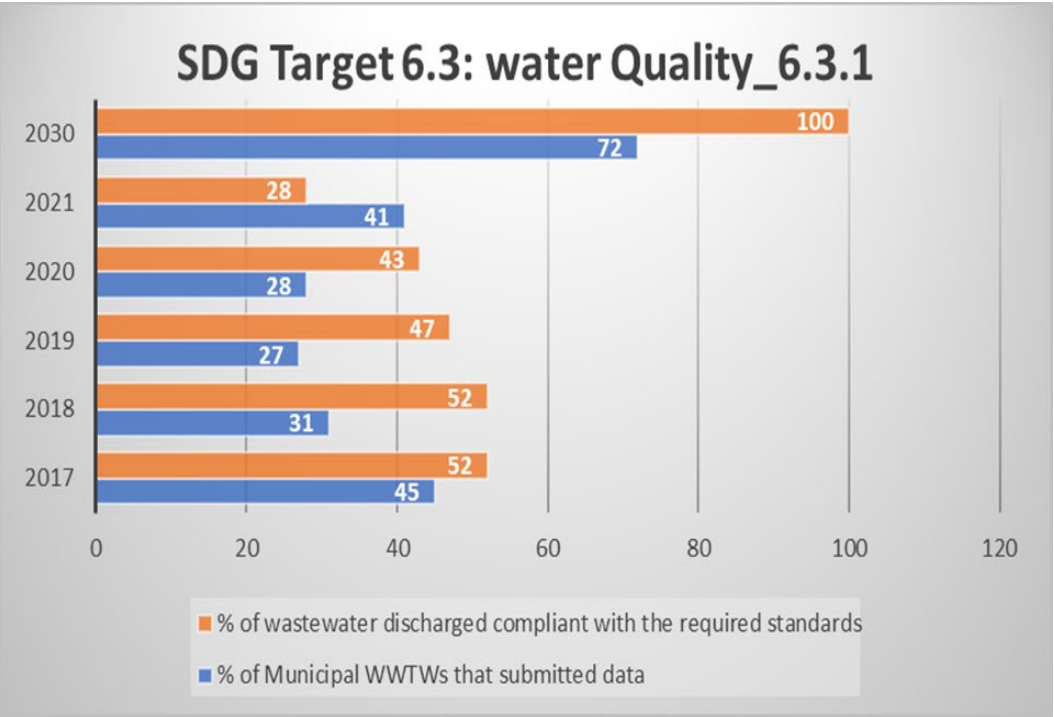


	2016	2017	2018	2019	2020	2021
SAFELY MANAGED	49%	52%	53%	55%	58%	57%
JMP BASIC SANITATION	7%	7%	6%	6%	7%	8%
JMP LIMITED SANITATION	25%	24%	24%	22%	18%	20%
UNIMPROVED SANITATION	15%	14%	15%	15%	15%	14%
OPEN DEFECACTION	3%	2%	1%	1%	1%	1%



SDG 6.3.1: PROPORTION OF WATER CONTAINING WASTE LAWFULLY DISCHARGED.”

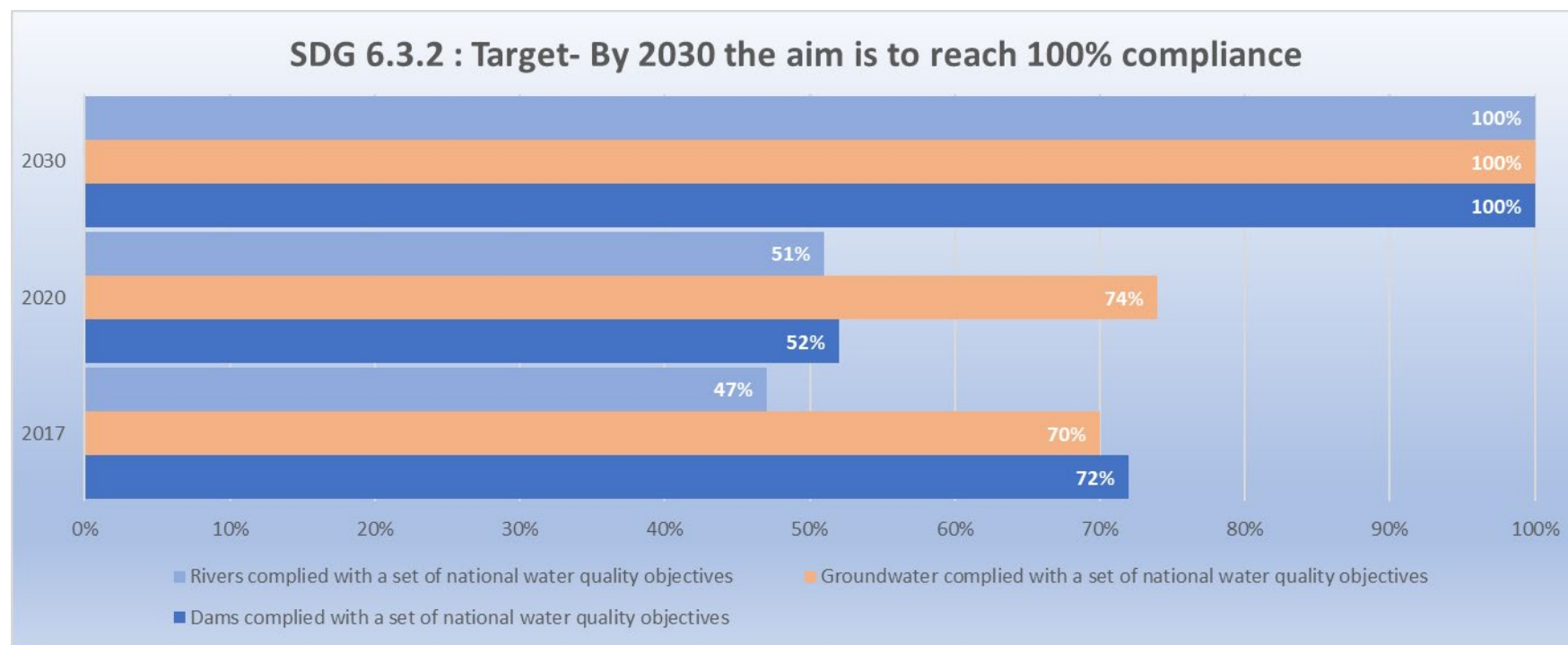
- 2030 Target: Halve the proportion of wastewater that is NOT lawfully discharged by 2030 (i.e. using 2017 as the baseline, this means 76% of Municipal discharges must be lawful).
- There is an evidence of drop or reduction in effluent quality compliance
Therefore, not on-track to achieve the set target
- However a great improvement in data is needed to understand the extent and location of the problem



Indicator Description	2017	2018	2019	2020	2021
% of Municipal WWTWs that submitted data	45	31	27	28	41
% of wastewater discharged compliant with the required standa	52	52	47	43	28

SDG 6.3.2: PROPORTION OF BODIES OF WATER THAT COMPLY WITH THE WATER QUALITY OBJECTIVES

- **2030 Target: 100%** of bodies of water comply with the water quality objectives



SDG 6.4 – WATER USE EFFICIENCY



*SA losses are exceptionally high: None Revenue Water (NRW) is currently at about **45%** which equates to more than **R9.9 billion** and Per capita consumption is approximately **237 l/c/d** compared with the world average consumption of approximately **173 l/c/d***

*It has been estimated that many **irrigation** schemes experiences water losses of between 35% to 45%*



SDG 6.4 WATER USE EFFICIENCY

Year	6.4.1-WUE (USD/m3)	6.4.2 -Water Stress (%)
2015	14.9	41.38
2017	14.32	63.561*
2019	15.11	64.04*
2020	13.77	65.03*

- 6.4.1
 - Data collection and analysis process present significant challenges,
 - % of Aquastat questionnaire received by FAO - 13% in the sub-Saharan Africa and 25% in Northern Africa
 - Water use efficiency worldwide rose from \$17.4 per cubic metre in 2015 to \$19.4 per cubic metre in 2019.
 - 12% increase in water use efficiency.
- 6.4.2
 - Disaggregation of water stress by basin allows for a better territorial analysis

***SA adopted FAO's method of computation for Target 6.4.2 from 2017**

Four Different Levels of Stress Severity	
NO STRESS	< 25%
LOW	25–50%
MEDIUM	50–75%
HIGH	75–100%
CRITICAL	>100

SDG 6.5 - IWRM

Target - "By 2030, Implement Integrated Water Resources Management (IWRM) at all levels, including through trans-boundary cooperation as appropriate"

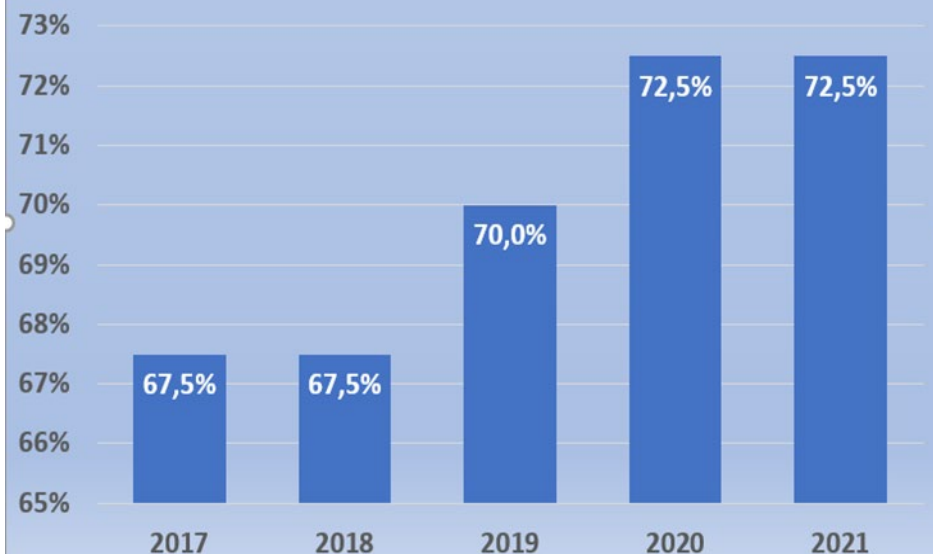


Indicator 6.5.1 – Degree of integrated water resources management implementation

Indicator 6.5.2 – Proportion of trans-boundary basin area with an operational arrangement for water cooperation

Indicator Number	Indicator Description	2017	2018	2019	2020	2021
6.5.1	Degree of integrated water resources management implementation	67.5	67.5	70	72.5	72.5
6.5.2	Proportion of trans-boundary basin area with an operational arrangement for water cooperation	100	100	97.5	95	95

SDG 6.5.1: Degree of integrated water resources management



SDG 6.5.2: Proportion of transboundary basin area with an operational arrangement for water



SDG 6.6 - ENVIRONMENT

Indicator	Results/ Trends available	Comments
Wetland Extent	2.1 Mil ha: 2017 2.6 Mil ha: 2020	Cannot use this to establish trends. Different methods were used in the different years - Only 7% of wetlands have been mapped to high confidence (NBA Report 2011 vs 2018)
Estuary Extent	171 046 ha: 2017 200 730 ha: 2020	Cannot establish trends yet. Different methods were used in the different years, but will be able to determine trends in the next NBA (2023) (NBA Report 2011 vs 2018)
Artificial Systems	0,17%: 2017 No report: 2020	Cannot establish Trends yet. Busy consolidating Dams Spatial Layers
River Quantity	30% reduction in flows from Natural No report: 2020	Cannot establish Trends yet. Busy selecting gauges with high confidence data
Estuary Water Quantity	33% reduction in flows from Natural: 2017 No Report: 2020	Cannot establish trends yet. Need updated hydrology assessment – in preparation for next NBA-2023
Groundwater Status	Trends available for 2015-2019 using data from 1800 boreholes	Can determine trends



6A-INTERNATIONAL COOPERATION

- Target 6a as a means of implementation is aimed at creating an enabling environment for the flow of external funding. Determining the full extent of the contribution needed from all donors operating within a given sector such as water and sanitation in South Africa to reach the target by 2030 is difficult to accurately determine. There is no limit and therefore the criteria for the Target and indicator have been met.



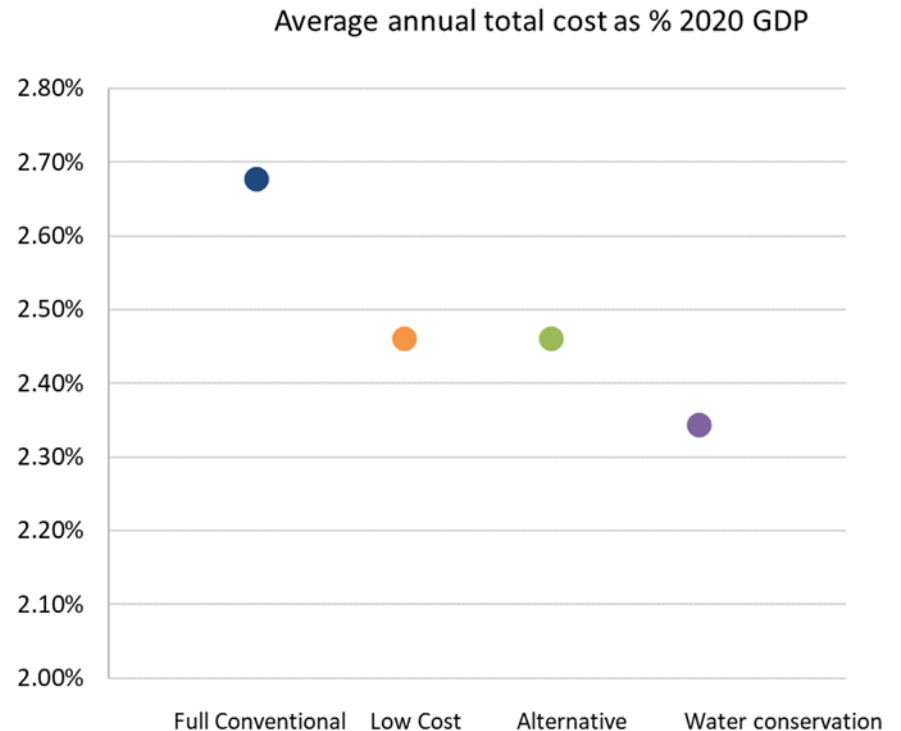
SDG6 B – COMMUNITY PARTICIPATION

Will we achieve this Target by 2030?
Yes, the criteria for this Target has been met already.



THE AVERAGE ANNUAL COST TO ACHIEVE THE SDG WATER AND SANITATION ACCESS TARGETS IS 2.3%-2.7% OF GDP (R121-R131 BILLION P.A. TO 2030)

- The lowest cost scenarios are those that include extensive Water Conservation and Demand Management.
- Capital expenditure need is dominated by renewal of existing infrastructure.
- Individual services required by the SDGs may be unaffordable in urban informal areas.
- The largest capital investments are required in metros and intermediate city municipalities, followed by B4 rural municipalities.
- The greatest expenditure is required in dense urban areas, where the cost per household is also the lowest.



SDG6 SUCCESSES



- South Africa has developed arguably the most effective operational structure for the implementation of SDG6
- South Africa's National Water & Sanitation Master Plan (NW&SMP) and the National Water Resource Strategy (NWRS).
- Creation of a number of cross-cutting Task Teams that include critical inclusion of issues such as Climate Change, Interlinkage (Synergies and Trade-Offs) with the other 16
- Inclusivity - Disability, Youth and Gender in particular,
- Through the process highlighted thusfar, there have been many success stories to share and outputs achieved, including and not limited to:
 - Water Services Improvement Plan (WSIP) - DWS is putting in place a Water Services Improvement Programme to strengthen its support and intervention at municipal level.
 - DWS has established a Water Partnerships Office to support municipalities with financial structuring, feasibility studies and contracting with the private sector and blended finance for PPPs for water and sanitation services
 - The development of the National Sanitation Integrated Plan provides a 10-year roadmap for ensuring access to adequate sanitation services by 2030
 - The development of the National Faecal Sludge Management Strategy
 - Establishment of a Sanitation Technology Technical Coordination Committee.

SDG6 SUCCESSES



- National Groundwater Monitoring Programme has been implemented which is the feeder to the assessment of SDG targets/ indicator as far as groundwater quality.
- Water Conservation and Demand Management and its contribution towards water use efficiency. By minimising non revenue water such as high leakages, it removes the burden and capital expenditure of new infrastructure requirements.
- SDG Interlinkage Task Team was initiated to identify the water and sanitation requirements of the other 16 SDGs and unpack the synergies and trade-offs of each.
- The development of a Project Dashboard Development – the main focus being to have an electronic system that reflects all information of projects in a Dashboard application format that everyone will have access to.
- Reviewing the Infrastructure Asset Management (IAM) Framework & Strategy whilst rolling out support to all 144 Water Service Authorities in South Africa to develop their own 5 Year Plans and implement each accordingly
- The Department of Fisheries, Forestry and Environment has produced a 2018 National Biodiversity Assessment, (NBA) report contains an updated wetland map used for reporting wetland and estuarine extent.

CHALLENGES TO BE ADDRESSED

National Water & Sanitation Master Plan (NW&SMP) : Total Sector Compliance and Accountability is required

The NW&SMP is the implementation arm of SDG6 – if NW&SMP / NWRS fails, so does SDG6 and vice versa – we will either win or lose together and the latter is not an option.

Water Conservation Demand Management is critical. NRW to reduce from 45% to 15%

Infrastructure Investment to address the R131 mill / annum requirements and the Funding Gaps of R42 mill/annum

Radical Infrastructure Asset Management/ Revenue Management focus to secure water and sanitation infrastructure, curb NRW (45% which equates to R9.9 billion) and ensure appropriate sustainable solutions for all

Effective, efficient, well capacitated and financially sustained WSA's which are currently failing

Reaction needed by Sector to **Blue Drop / Green Drop /No Drop**



NATIONAL AGENCIES INVOLVED IN SDG 6 ACHIEVEMENT

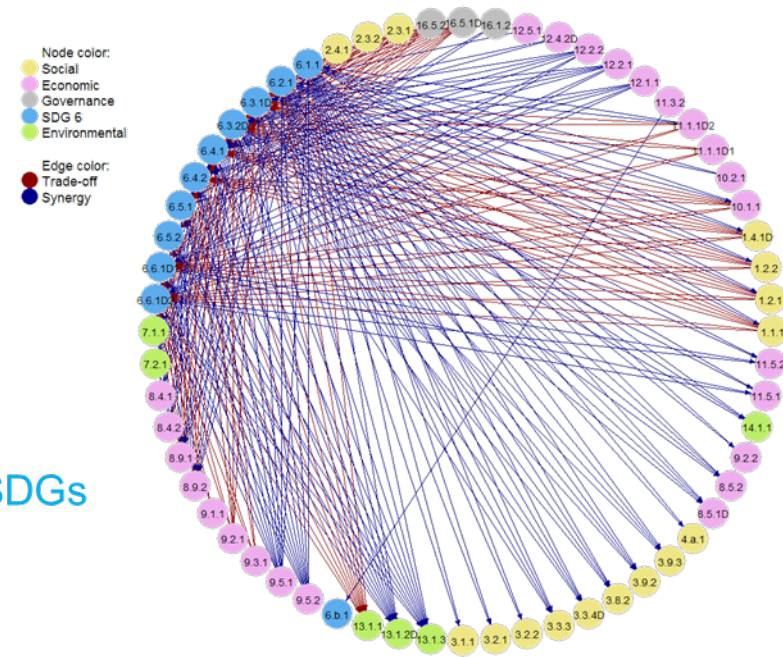
- Department of Water and Sanitation
- Department of Forestry, Fisheries and Environment
- South African National Biodiversity Institute
- Water Research Commission
- Centre for Scientific and Industrial Research
- Department of Corporate Governance and Traditional Affairs
- South African Local Government Association
- Municipal Infrastructure Support Agent
- STATS South Africa
- Water Institute of Southern Africa
- 144 Water Service Authorities

MOST IMPORTANT SDG 6 TARGET(S) AND INDICATOR(S)

- Most important targets and indicators: All of them
- Least important targets and indicators: None of them
- Other relevant contexts

8 x SDG6 Targets are integral with one another

SDG 6 is central and key to the success of remaining 16 SDGs



- Feedback or comments on SDG-PSS platform

South Africa is not yet implementing SDG-PSS platform but are intending to do so following this session

- How SDG-PSS online course contributed to helping you how to navigate the tool's main features?

Online Training has been completed and attendance of the workshop for empowerment purposes in preparation to start using the SDG-PSS

RELEVANCE OF SDG-PSS COMPONENTS

- Most relevant

Components :

Capacity; **Finance**; Policy and Institutional; Gender Mainstreaming;

Disaster Risk Reduction (DRR)/Resilience Mainstreaming; Integrity; and Status

- In SA there is a 34% financial deficit which if not bridged SDG6 will not be achieved. There can be shortfalls with the others and yet the SDG6 objective cannot be reached
- Not/least relevant
- Others can be challenging but the objectives can be achieved without. However they are still critical to overall achievement, performance, acceleration, equality and equity amongst consumers



**I SUPPORT
GOAL 6
CLEAN WATER
AND SANITATION**

