



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

ANNEXURE 41

METRO TRADING SERVICES REFORM PROGRAMME

TRADING SERVICES REFORM STRATEGIES AND ASSOCIATED IMPLEMENTATION ROAD MAPS

2025/26 BUDGET (JUNE 2025)

Annexure A

CITY OF CAPE TOWN

WATER AND SANITATION

REFORM STRATEGY

2024

Version 2.0: 19 September 2024



CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

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1 Introduction

The National Treasury (NT) has embarked upon a programme of grant reform, applicable to the utility services of the country's metros. To this end, NT has identified that "unlike for other municipal services, the most important source of trading service revenues are their own service charges, which should in principle be set and managed to make a surplus". NT further elaborates that, "trading services should be able to generate real (cash) operating surpluses to fund their capital and maintenance spending".

The National Treasury identified that trading service surpluses are dependent on factors such as:

- "management efficiency (cost of services provided, affordability of tariffs charged; collection efficiency, etc.);
- the need for medium- and long-term investments (and the cost of capital);
- the profile of commercial, institutional, and household consumers (and the scale and efficacy of service subsidies provided); and
- the state of the local economy."

In order to access incentive grants within the Urban Settlements Development Grant, for the 2025/2026 financial year, the Water and Sanitation directorate is required to generate a reform plan. The requirements of this plan are not only to emphasise the importance of spending on both new and existing bulk infrastructure, but also to reflect the importance of:

- a) customer service and trust;
- b) sound finances (necessary to maintain and invest in assets);
- c) asset maintenance and operations; and
- d) investment in new assets.

The City of Cape Town has a sophisticated strategic ecosystem for Water and Sanitation. The well-publicised drought of 2016 demanded that the City review its approach to water and water services. Initially, a new direction for the water utility was captured in the City's Water Strategy. However, the City has continued to develop its plan for water services beyond the initial strategy to include the re-arrangement of the utility organogram, the investment programme for water infrastructure expansion, the maintenance programme for infrastructure assets, corresponding tariff structures for water services, and the utility business plan. In 2023, the City's Water and Sanitation Directorate was recognised as Africa's first Leading Utility of the World (LUOW). This achievement demonstrates the directorate's commitment to providing the best service to its customers.

This document outlines how the City of Cape Town aligns itself to the grant conditions of the National Treasury as well as re-affirms the City's direction to establish the Water and Sanitation directorate as a financially sustainable, modern utility.

The City is committed to developing a separate Annual Financial Statement for the Water and Sanitation function as a financially ring-fenced business unit.

The transversal programme (a programme to improve coordination and efficiency across the directorate; namely Technical and Commercial services) implementation, does not contradict single point accountability of management as it is intended to recognise the interdependencies of the various elements of business value chain, without losing lines of responsibility.

The partnerships between political and water services management leadership has enhanced over the years in practical ways, viz through dealing with real crises such as the drought, electrical outages impacting on service delivery and directives related to inland water and treated effluent quality deterioration. The Mayoral Priority Programme (MPP) also highlights these key challenges as well as others and provides solutions which are monitored and tracked at a high level to ensure customer service delivery issues receives the highest priority.

Clear strategic leadership has translated into an infrastructure led economic growth agenda as reflected in the Integrated Development Plan (IDP) and Water Services Demand Plan (WSDP) with significant growth in the capital and related operational portfolio. Central to this growth is the delivery on the New Water Programme, Wastewater Treatment and Energy instability mitigation investment.

The Directorate has a number of service level agreements with various City departments in place to define the levels of service that will be provided by Water and Sanitation as the service provider to other departments which include:

- Human Settlements;
- Revenue ;
- Contact Centre.

The Memorandum of Agreements (MOA's) are periodically reviewed and these MOA's are there to facilitate the relationships (within the Directorate and external to the Directorate) to govern interactions for the delivery of service. However, there are no clear performance indicators or monitoring thereof.

The Water and Sanitation Directorate receives services from, but not limited to, Corporate Services, Corporate Finance, and Future Planning and Resilience and Auditing. In addition, there is no performance system or clear Service Level Agreements (SLAs) to determine whether we are getting value for money for the services received.

In order to strengthen the Single Point of Accountability, the Executive Director: Water and Sanitation (ED: WS) needs to enter in clear service level agreement with clear deliverables and frequently monitor performance. At present, the Water and Sanitation Directorate is representative of Model 2 of the National Treasury reform initiative with further strengthening required to fully enable Single Point Accountability. The City Manager needs to delegate powers to the ED: WS to monitor and evaluate performance to determine whether the services meet value for money considerations, to terminate services in instances of non-performance, and explore alternative mechanisms for a better service.

2 Cape Town economic and spatial context

2.1 Economy

A range of persistent economy-wide challenges will continue to impact the affordability of municipal services to City customers. The unsteady growth since the Covid-19 recession (-5.4% growth in 2020) has seen some sectors recover, while others still remain below pre-pandemic levels. These struggling sectors include manufacturing, construction and trade and hospitality. Following low economic growth of 1% recorded in 2023, Cape Town's growth trajectory for 2024 is forecast at only 1.2% (South Africa Regional eXplorer, 2024). This is below the IMF's global growth expectation of 3.2% for 2024, indicating local underperformance. The low economic growth in the first quarter of 2024, despite improved load shedding, was attributed to declining levels of spending across all the main expenditure categories (household consumption, government and fixed investment) indicative of low levels of confidence in the economy.

The sustained higher cost of living has been coupled with high unemployment rates in the City, reinforced by low growth. The Cape Town narrow unemployment rate increased in 2024 quarter 2, to 23.4%, struggling to reach rates seen before the pandemic of 21.9% (2019). Unemployment rates are persistently high, contributing to an increase in the number of indigent people and worsening inequality in the city. Stagnant real incomes and reduced affordability push more households below the poverty line. This will place pressure on Cape Town residents' ability to pay for goods and services. The municipality also faces growing pressure to increase capital spending for social and environmental risks, which, once fed through to rates and tariffs, decrease affordability further.

Sluggish domestic economic growth, high unemployment, load-shedding, escalating municipal service costs and inefficient public transport systems are likely to continue to impact on the City's cash flow. However, the Moody's outlook for the City remains positive in 2024. The City is responsible for ensuring an effective and efficient revenue collection service is in place. The City's debt management strategy is continually being redefined to enhance long-term sustainability. Revenue collection is further elaborated on in section 5.2 of the document.

The following figures are the City's annual projected economic growth rates:

Table 1: City of Cape Town annual projected growth rates

Year	Headline Projected Economic Growth*
2025	2.4%
2026	2.2%
2027	2.1%
2028	2.1%
2029	2.1%

Source: BER, September 2024

The core data sources used to calculate the above:

- The Bureau for Economic Research's latest **economic growth forecast for the South African economy (July 2024)**.
- Historical Gross Domestic Product growth figures and projections for Cape Town from South Africa Regional eXplorer - one of the City's economic data providers (August 2024).

The 10 year historical (average) differential between economic growth at the Cape Town and South African levels (which we calculated as 0.2%) was then applied to the BER's forecast for South Africa to derive a Cape Town scale projection until 2029.

2.2 Spatial Planning and Population Growth

In 2022, the population of Cape Town was 4 772 846, an increase of 27.6% since 2011, and the number of households¹ was 1 452 845, an increase of 36.0% since 2011. Cape Town's population accounts for 64% of the Western Cape's population. The growth in households has outstripped population growth as Cape Town's average household size has been decreasing, averaging around 3.3 persons per household in 2022^[1].

Table 2: Population and Households – Actual and Percentage change between censuses

Cape Town	1996	2001	2011	2022	% Change 2001 to 2011	% Change 2011 to 2022
Population	2 563 095	2 892 243	3 740 025	4 772 846	29.3%	27.6%
Households	653 099	777 389	1 068 515	1 452 845	37.4%	36.0%
Average Household Size	3.92	3.72	3.50	3.30		
Average Annualised Population Growth Rate²		2.45%	2.55%	2.42%		

Note: The % change shows the growth of population and households between each census.

The City reviews its Municipal Spatial Development Framework (MSDF) and associated District plans every 5-10 years to ensure alignment with various City strategies. The MSDF acts as a blueprint for Cape Town's future growth, guiding decisions on land use, infrastructure development, and urban planning to achieve a sustainable and equitable city. Based on the current MSDF using 2018 as baseline, the 2040 projected totals for residential and non-residential land uses is highlighted below:

Table 3: Land use estimates

Landuse	2018 (est.)	2040 (projected)
Residential (number of dwelling units)	1 312 844	1 936 276
Retail (m² GLA)	8 616 281	9 659 279
Office	7 544 246	9 015 836
Industry	23 353 755	26 743 133

^[1] ctapps.capetown.gov.za/sites/ikrc/Pages/Official-Stats-Pop-Census2022.aspx

3 City of Cape Town strategic context

The Water and Sanitation Directorate is focused on delivering exceptional services that support the City's overall goals. The Directorate does this through the creation and implementation of strategies and plans to achieve these objectives efficiently and effectively. The below highlights these key strategies and their intended application:

- Water Strategy: commits the City to a new approach for water resilience and utility sustainability. The new water programme is a key feature of the Water Strategy.
- Human Settlements Strategy: confirms the City's thinking toward creation of integrated human settlements, including the departure points for the development of informal settlements and the requisite services that make for safe communities.
- Infrastructure Strategy and corresponding Infrastructure Report: captures the City's multiyear investment pipeline and rationale, including the water utility capital projects.
- Water Services Development Plan (WSDP): is guided by the City's Water Strategy (2019) that will be implemented via a transition plan to achieve the Directorate's vision of "a water-sensitive city that optimises and integrates the management of water resources to improve resilience, competitiveness and liveability for the prosperity of its people" by 2040.
- Water Conservation Water Demand Management Strategy: A strategy to ensure the long-term balance between available water resources and water demand, to postpone the need for expensive capital infrastructure projects for as long as it is economically viable and to minimise water wastage.
- Water & Sanitation Sector Plan: a reflection of the capital pipeline for the W&S directorate
- Water and Sanitation Business Plan: An annual plan linked to both the IDP, Water Strategy and the WSDP, which sets out the objectives the Directorate aims to achieve for the financial year.

The City's Budget Policies including the Water Tariff Policy: the Credit and Debt Collection Policy, and the Rates Policy. These instruments guide the City's financial thinking around tariff levels, reclamation of outstanding debt, and support for indigent households.

- Infrastructure Asset Management Policy: the City's commitment to systems that maintain and protect infrastructure assets

4 Establishing a sustainable water service to support growth

4.1 Water and sanitation service challenges and underlying causes

The City of Cape Town's Water and Sanitation Directorate manages a water distribution network of approximately 11 023km, 80 water pump stations and 134 reservoirs. The sewer conveyance network comprises of approximately 9 621km (pipe diameters ranges from 100 mm – 1800 mm) and 487 sewer pump stations. At least 75% of the water network is supplied via the “110 system” which consists of five main service reservoirs namely, Faure (640 Mℓ), Blackheath Lower (538 Mℓ), Tygerberg No1 (34 Mℓ) and No 2 (276 Mℓ), and Platteklouf (571 Mℓ) as well as a network of bulk supply pipelines downstream from these reservoirs. All these reservoirs are at a top water level (TWL) = of ± 110 m. This design allows for more than half the City to be supplied under gravity and only a 25% of the network is reliant on pumping. The sewer conveyance network however, only allows for approximately 25% of the network to drain via gravity and 75% requiring pumping, some catchments requiring multi-level pumping.

The topography of the City with its surrounding mountains and large “flat” areas with respect to elevation above sea level, predominantly made up of the Cape Flats, is both an advantage and a disadvantage in providing water services. The high lying areas provides an opportunity to store surface water, provide hydroelectricity and a sustainable water supply pressure to majority of the City, however these “flat” areas poses a challenge for sewer conveyance resulting in the need for many pump stations. In the high lying residential areas, there is also a need to pump water to high lying reservoirs for distribution to these areas.

Managing an infrastructure network of this magnitude comes with its own set of challenges, which affect service delivery. Some of these challenges include but are not limited to:

- Deteriorating water treatment and wastewater treatment infrastructure;
- Maintaining Green Drop status at all wastewater treatment works, Blue Drop status and No Drop across the City;
- Unplanned growth and densification in Less Formal Township Establishment Act (LFTEA) Areas and Informal Settlements and the related impact infrastructure provision, upgrades and maintenance;
- Pump station failure particularly on the sewer network;
- Pollution on inland water bodies;
- Vandalism and foreign objects in sewer networks – reducing sewer capacity.

Other key challenges related to delivering reliable water and sanitation services are related to aging infrastructure for both bulk and reticulation services, as a result of a history of slow asset replacement and high repair and maintenance costs.

The impact of ageing infrastructure is evident in the number of sewer pipe failures, sewer pump station failures and water pipe burst as indicated in the figures below.

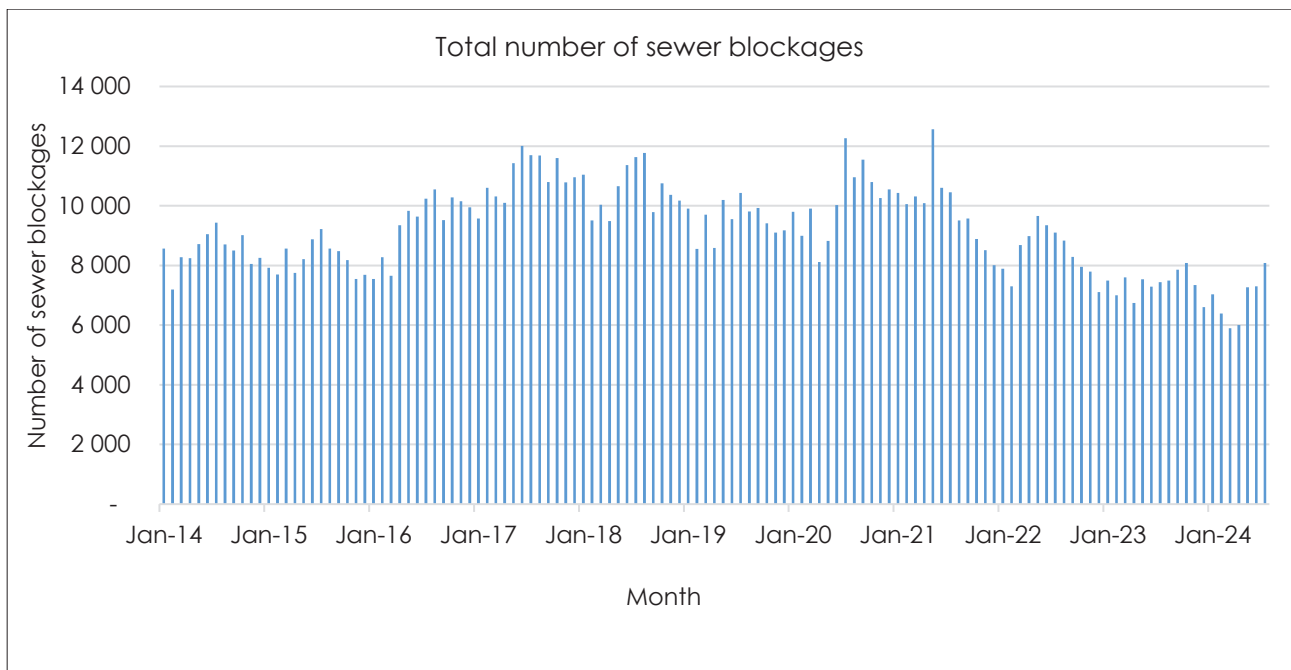


Figure 1: Sewer blockages trend for the last ten years (2014 – 2024)

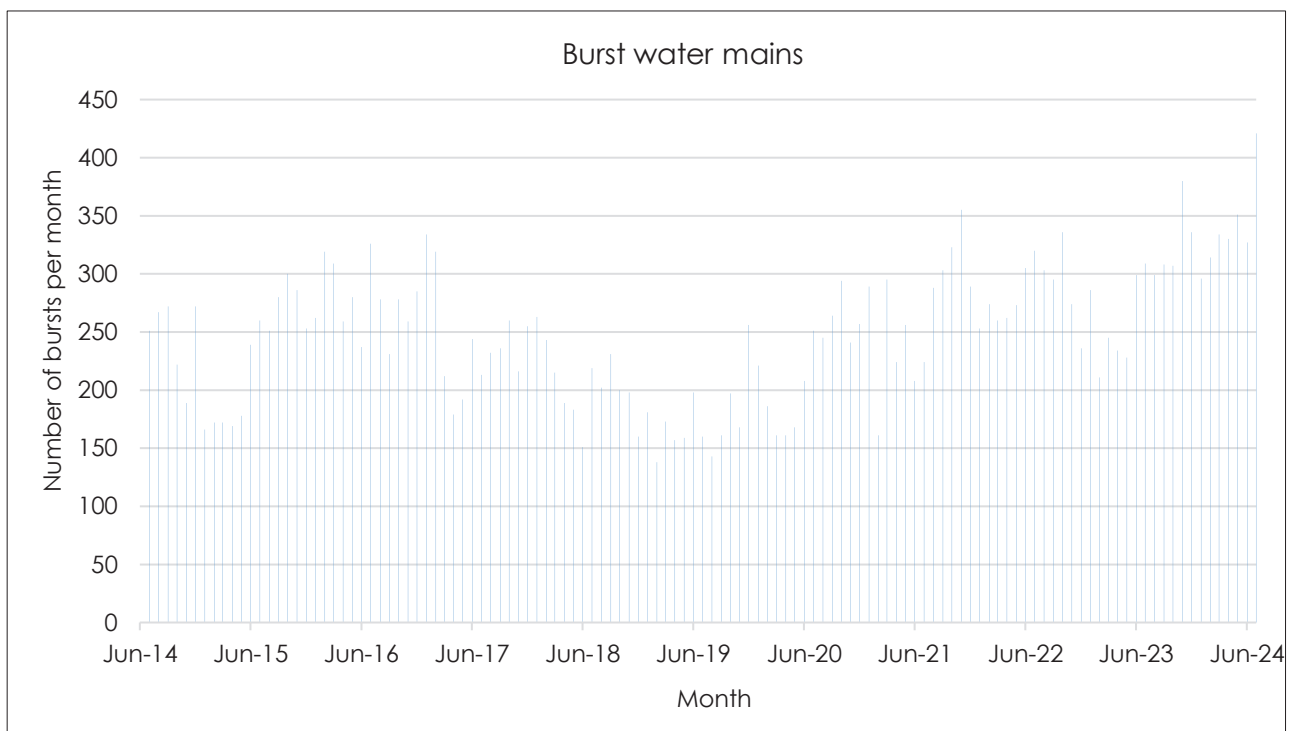


Figure 2: Burst water main per month (June 2014 - June 2024)

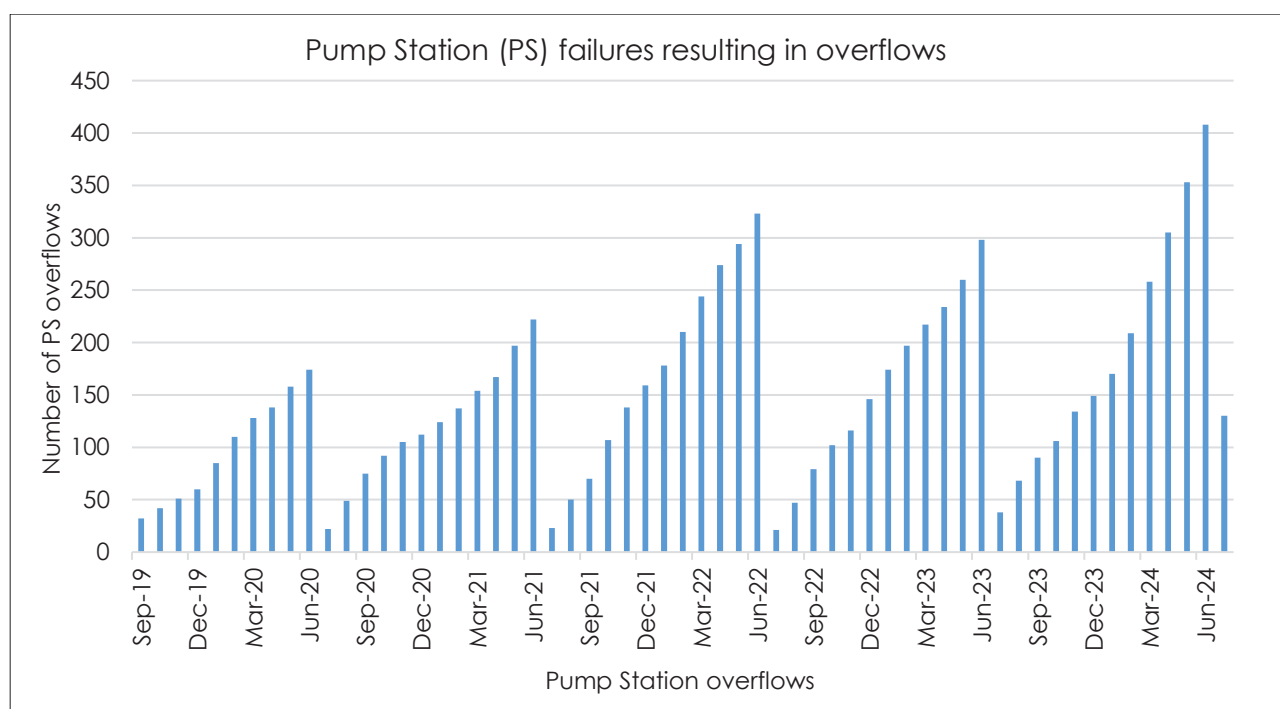


Figure 3: Cumulative data pertaining to sewer pump station failures per financial year

Sewer overflows, caused by network obstructions, pump station malfunctions, and storm water infiltration, have become a major issue for both residents and the environment. These spills are the most frequent complaint received by the City and contribute significantly to river and wetland pollution. The problem is exacerbated during the winter months when rainwater enters the sewer system through unauthorized connections, overwhelming the network and leading to overflows. During the electricity outage's there were major pump station challenges resulting in intermittent water supply problems to high lying areas and multiple sewer spills.

Cape Town's residential population is anticipated to grow from roughly 4 million in 2019 to 5.6 million by 2040. The City of Cape Town's natural growth rate combined with the rate of in-migration compared to the slow rate of housing delivery over many years has led to a major housing backlog of approximately 400 000 households which continues to grow at a rate of close to 30 000/year. This has had a major impact on existing water service infrastructure and the ability to provide the constitutional right to potable water and adequate sanitation.

This is a key driver to the following:

- High levels of back yarder accommodation, rapid increases in informality in many parts of the City. During Covid there was a major surge in illegal occupation of land, both private and public land with a significant impact on servitudes (W&S, Transport, detention ponds, overhead cable).
- Densification and informality typically results in an increase in solid waste, impacting on the sewer and stormwater infrastructure. This results in the pump stations being damaged, sewer spills, prolonged periods of surcharge release of corrosive gases leading to rapid deterioration of pipe condition and ultimately pipe collapses.

The rapid growth of informal settlements has significantly increased the demand for water services, presenting a unique challenge due to difficulties in accurately measuring consumption. This strain on resources has exacerbated existing budget constraints within the Informal Settlements Basic Services Branch. The ongoing provision of new infrastructure is directly tied to the available operational (OPEX)

budget, which is already severely limited. This is a major concern as new rollouts in the current financial year are hindered by insufficient funds allocated for contracted services.

It's important to note that the Water and Sanitation Directorate relies on revenue from tariff and equitable share to support the water and sanitation services in informal settlements. The increasing informality across the City has amplified this further highlighting the urgent need for sustainable funding solutions.

4.2 Action plan to address service challenges

The Water and Sanitation Directorate is committed to delivering water services that meet the highest national standards, ensuring a safe and healthy environment for its citizens. Our bulk services, including Water Treatment Plants (WTPs) and Wastewater Treatment Works (WwTWs), are rigorously monitored and evaluated against the Blue Drop and Green Drop Certification Programs, as established by the National Department of Water and Sanitation.

A crucial factor in achieving these certifications is maintaining a balance between design capacity and operational capacity. Various factors can impact operational capacity, such as exceeding design demand, equipment malfunctions, or disruptions in electrical supply. These challenges can hinder water and wastewater treatment and pumping processes, potentially affecting both water quality and the downstream receiving communities and environment.

To ensure continuous improvement in our overall performance, the Water and Sanitation Directorate is conducting a comprehensive assessment of key bulk service infrastructure. This evaluation will help us identify areas for enhancement and ensure that our water supply meets the growing demands of our city while maintaining the highest standards of quality and safety.

Bulk Water

City of Cape Town is one of three (3) bulk water service providers in the Western Cape. It supplies potable water to the City of Cape Town, and five (5) water supply systems in the Drakenstein and Stellenbosch Local Municipalities (LM). The bulk of the treated water is produced from five (5) large water treatment plants (WTP), namely the Faure WTP, Blackheath WTP, Wemmershoek WTP, Voëlvllei WTP and Steenbras WTP. The last of these to be built was the Faure WTP which was commissioned in 1994. The WTPs are all getting old and are in need of refurbishment. This is evidenced by an inability in all, but the Blackheath WTP to meet their design production rates.

Although the City has improved on its Blue Drop score from 95.9% in 2014 to 98.1% in 2023, it still recognises the need to improve on operational limitations in the system. To do this, a high level condition assessment of the abovementioned five WTPs was done to determine what budget the City would need to set aside to refurbish these WTPs to ensure they can meet their design capacity and thus ensure the City does not fall short on its water production and quality obligations. The investigation found that the WTPs generally experienced similar challenges, namely that the sedimentation tanks needed to be refurbished and in particular the desludging valves and actuators needed to be replaced, further, the rapid gravity sand filters at all of the WTPs were failing to some or other degree. It was strongly recommended that more modern rapid gravity filter systems be installed to improve backwash efficiency and increase filter runs. The high-level refurbishment costs is approximately R2.1 billion and would be required by 2032.

Table 4: Summary of budget cost estimates for the full intervention schedule

	P&G (R)	Construction Works (R)	Contingencies (R)	Construction Cost (R)	PSP Total Cost (R)	Total Cost (R)
Total	313,630,000	1,254,540,000	235,230,000	1,803,400,000	295,310,000	2,098,700,000

Water and Sanitation is committed to maintaining its current Blue Drop status and ensures it complies with strict water quality checks as prescribed by the national government's Department of Water and Sanitation (DWS). This rigorous process means that water quality is closely monitored via a large number of water samples analysed according to the South African National Standards (SANS 241:2015) requirements. To ensure the continued excellent quality of our water, our laboratory tests over 5 700 samples of water each year, tested either on a weekly or bi-weekly basis. The frequency of test and turnaround of results is what enables W&S to react in a timeous manner to water incidents thus ensuring the impact on the downstream user is mitigated.

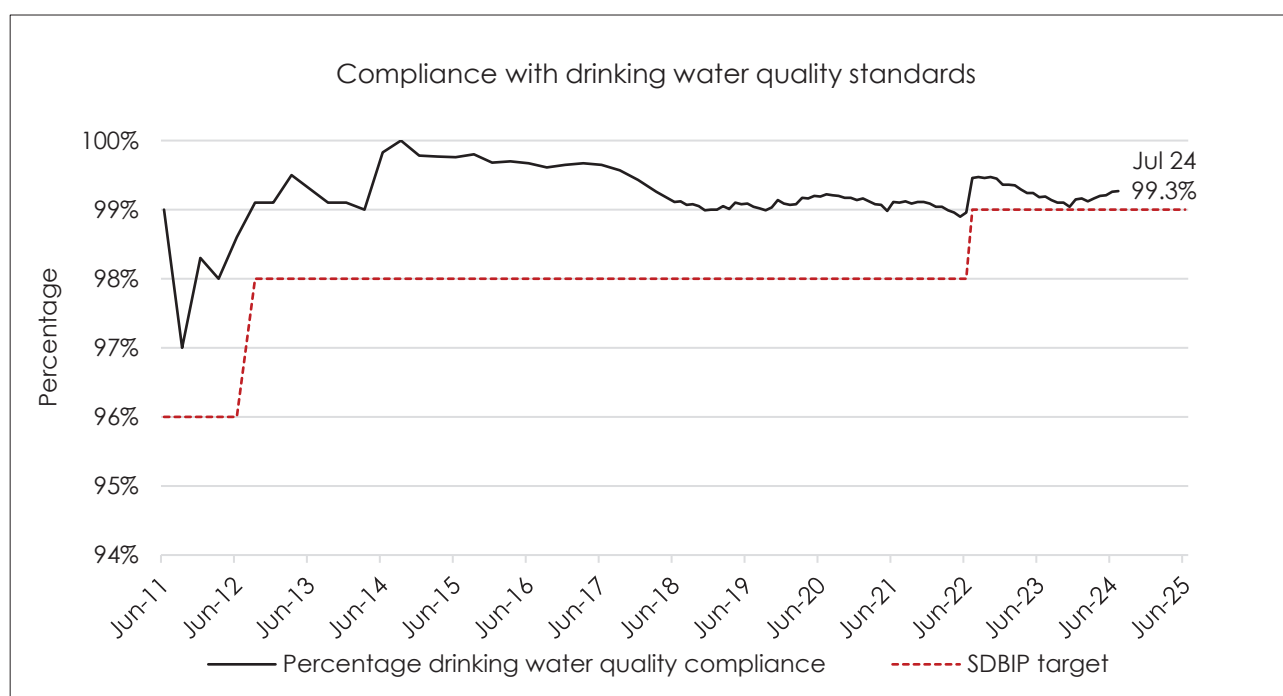


Figure 4: Water quality compliance with SANS 241

Wastewater

At present there are eight (8) wastewater facilities in Cape Town that are not achieving Green Drop status. Larger plants such as Macassar, Potsdam and Athlone are currently failing to reach an overall compliance of 60% due to operating above its design capacity, which results in inadequately treating the incoming wastewater. Capital budget indicates that an upgrade to Macassar, Potsdam, Athlone and Wesfleur is underway and this will assist in improving the overall performance of these treatment works. Further extension of the Zandvliet WwTW completed its first phase of upgrades in December 2023 and phase 2 is approved for FY 2028/2029. The expansion of Zandvliet ensure that the goal of being a water sensitive City.

A multi-year three phase project titled "Strategic Evaluation of the City of Cape Town Wastewater Treatment Works (WwTW)" is currently underway. The 26 CoCT WwTW were allocated amongst three Professional Service Providers, with phased deliverables over a period of time. Phase 1 of the Strategic Evaluation is the Status Quo of each WwTW, including for works overview, process status quo; current wastewater flow and characteristics, effluent quality compliance, condition assessment, current capacity check and proposed quick wins / recommendations in terms of improving treated effluent quality in a relatively short period of time with costing. Phase 2 is a capacity upgrade planning review, including flow / load projection approaches, flow and load projection calculations and proposed capacity upgrades with cost estimates and implementation timelines.

The scope for Phase 3 is currently being confirmed. Phase 3 is meant to ascertain what longer term process upgrades to existing processes would be required to improve treated effluent compliance in addition to the “Quick Wins” formulated under Phase 1, with cost estimates. Further, Phase 3 will include for license requirements that cannot be provided in-house (e.g. stormwater management plans, groundwater studies etc.) as well as for some Green Drop requirements (e.g. WUL audits by external Service Providers). Draft Reports for Phases 1 and 2 have been submitted for all 26 WwTW, and are currently under review by the City. Phase 3 has just kicked off with scope refinement and cost estimates for the work. It is anticipated that Phase 3 will be completed in stages over the next two financial years.

Lack of wastewater capacity can have significant negative consequences for public health, the environment, economic development, and overall quality of life. Investing in adequate wastewater infrastructure is essential for sustainable and healthy urban growth and investment. Investing in our wastewater infrastructure is crucial for complying with regulations, expanding our alternative water network, and reducing our dependence on potable water. This will enable us to implement innovative water reuse projects like the Faure Re-use scheme.

Non-Revenue Water

Non-revenue water (NRW), how it relates to the No Drop programme and more importantly the implementation of the Water Conservation and Water Demand Management (WCWDM) strategy is a focal point for Water and Sanitation. It looks at factors such as cost recovery for treated potable water supplied but not billed, impact of water demand interventions on reducing water demand/reliance on potable water but also water loss through the system as a result of leakages. City of Cape Town is the best performing metro with the lowest percentage NRW, per Capita Consumption (l/c/d) and Infrastructure Leakage Index (ILI) as per the 2023 No Drop Audit.

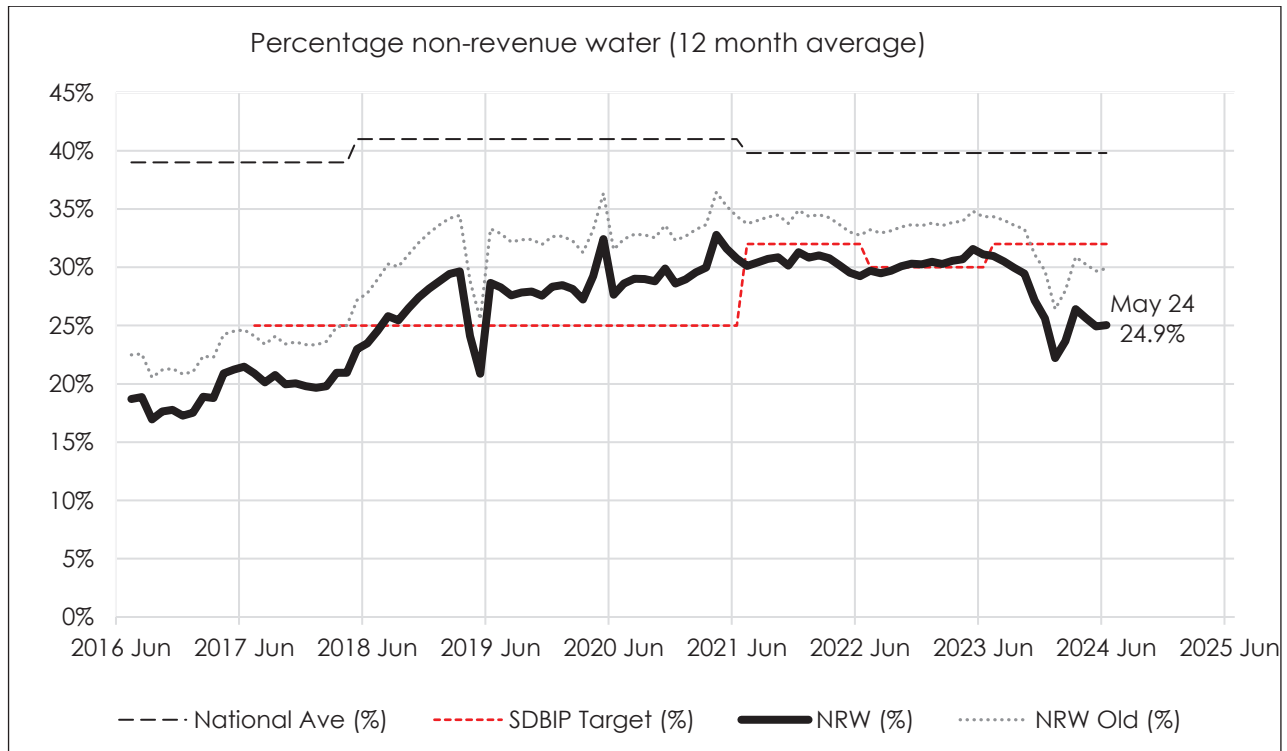


Figure 5: Trend in NRW for the City of Cape Town

The CoCT Non Revenue Water figure (NRW) is relatively good compared National average. There is however numerous historical fluctuations and reflects the challenge of accurate measurement. The current target is 30%, which is realistic.

Basics services to Informal Settlements

Human Settlements Directorate through its Informal Settlements Upgrading Programme (ISUP), commits the City to addressing informality in a manner that it is sustainable, supports the incremental development of settlements, and upholds the dignity of residents whilst acknowledging the constitutional rights of residents to have access to water and sanitation services. Water and Sanitation, as a minimum, and where possible, subject to budget availability and technical analysis is required to service informal settlements. This includes water and sanitation provision, maintenance of services and long-term upgrading transition.

Informal settlements grew by 60 000 households over four years at 10% per year with almost all of the growth occurring in the existing large settlements. The City aims to provide one (1) tap for every 25 households and one (1) toilet for every five households and continuously strives to improve year on year to meet set targets. The graphs below indicates service statistics across informal settlements since 2019.

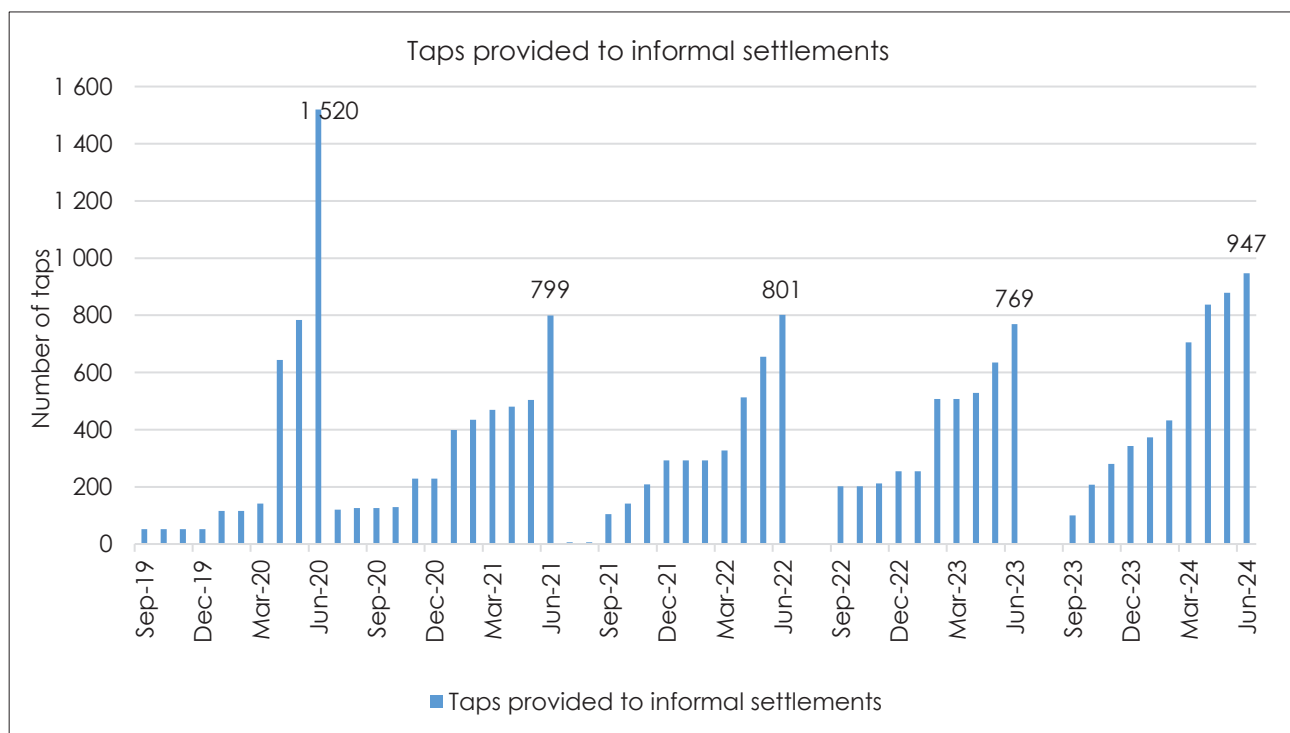


Figure 6: Annual cumulative performance data related to water service points (taps) provided to informal settlements per financial year

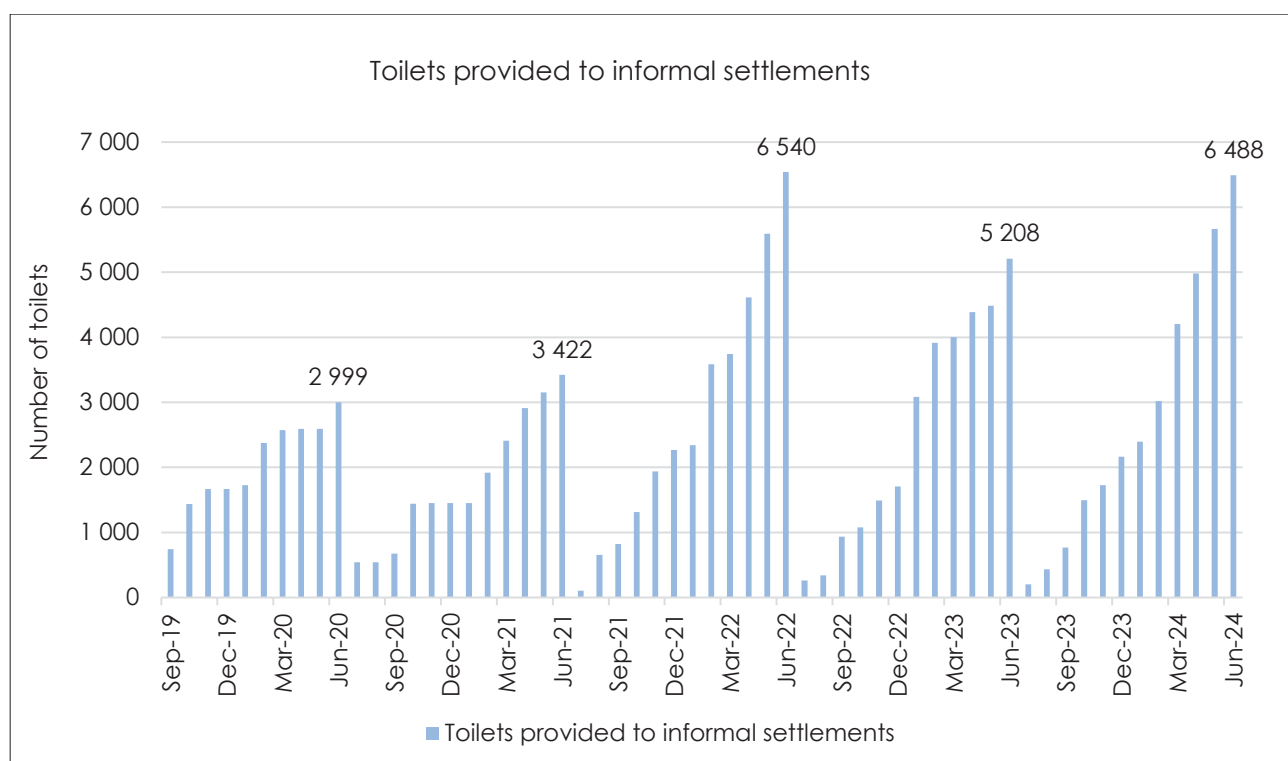


Figure 7: Annual cumulative performance data related to service points (toilets) provided to informal settlements per financial year

Pipe Assessment and Pipe Replacement Programme

Ageing infrastructure, particularly on the water distribution and sewer conveyance reticulation networks, is a growing concern for the directorate. In 2020 consultants in collaboration with stakeholder branches, have produced a Reticulation Pipe Replacement Potential (PRP) model. The model which uses an agreed selection of rated criteria for both Likelihood of Failure (LF) and Probability of Failure (PF) to produce a Compound Risk of Failure $PRP = LF \times PF$. It includes the primary criteria such as pipe material, age of pipe and historical failure rate but also several others such as hydraulic flow and pressure, soil condition, placement under verge or in road, proximity to other services, size and nature of area serviced (pipe criticality) or downslope from a sewer (risk of flooding).

The system is GIS-based, has individual pipe detail, can produce a variety of reports and can easily be updated. The higher priority identified pipes comes to:

- R614 989 000 for Water
- R995 570 869 for Sewer

The ranking has also been done for all pipelines for water mains at R20.600 Billion and at R50.104 Billion which has to all eventually be replaced near the end of their lifetimes (50-100 years). The data below indicates progress that has been made in the implementation of the PRP.

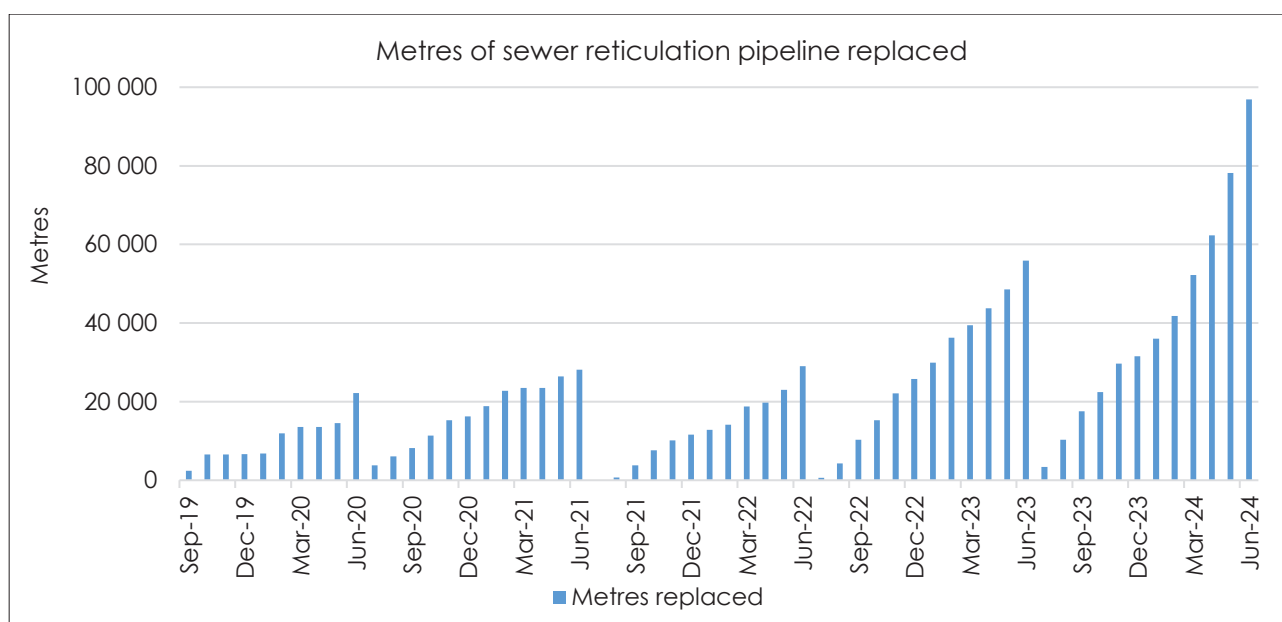


Figure 8: Annual cumulative sewer pipe replacement per financial year

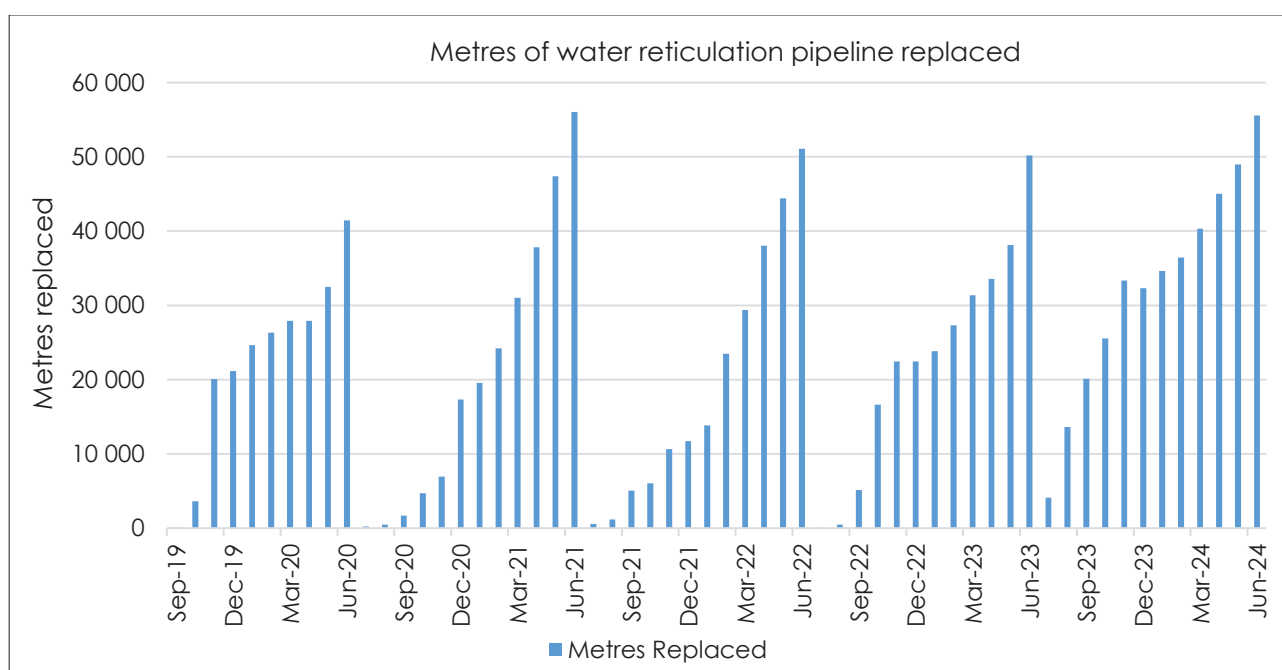


Figure 9: Annual cumulative water pipe replacement per financial year

4.3 Progress towards successful and effective Business Unit Management

A high-level review of the Internal Business Units project was undertaken in 2004, recommending the establishment of a Water Services authority and a Water Services Provider arrangement, and financial ring-fencing of water tariffs which was partially implemented in subsequent years. More recently, a re-alignment of the management structure following the adoption of the Water Strategy in 2019 it became necessary to ensure quick and effective response in fulfilling legislative mandates.

A Council resolution to review the macro structure and approve the establishment of Water and Sanitation as a City Directorate and re-designation of the Executive Director occurred in 2021. Further micro-organisational restructuring and alignment followed, most notably the creation of a Water and Sanitation Customer Services and Capital and Contract Management Branch to drive delivery and customer services.

The chronological progression to a Water and Sanitation business unit at Directorate level is outlined below and based on the approved macro (directorate) and micro (line department) structures that first became active on the City SAP System in the respective calendar years:

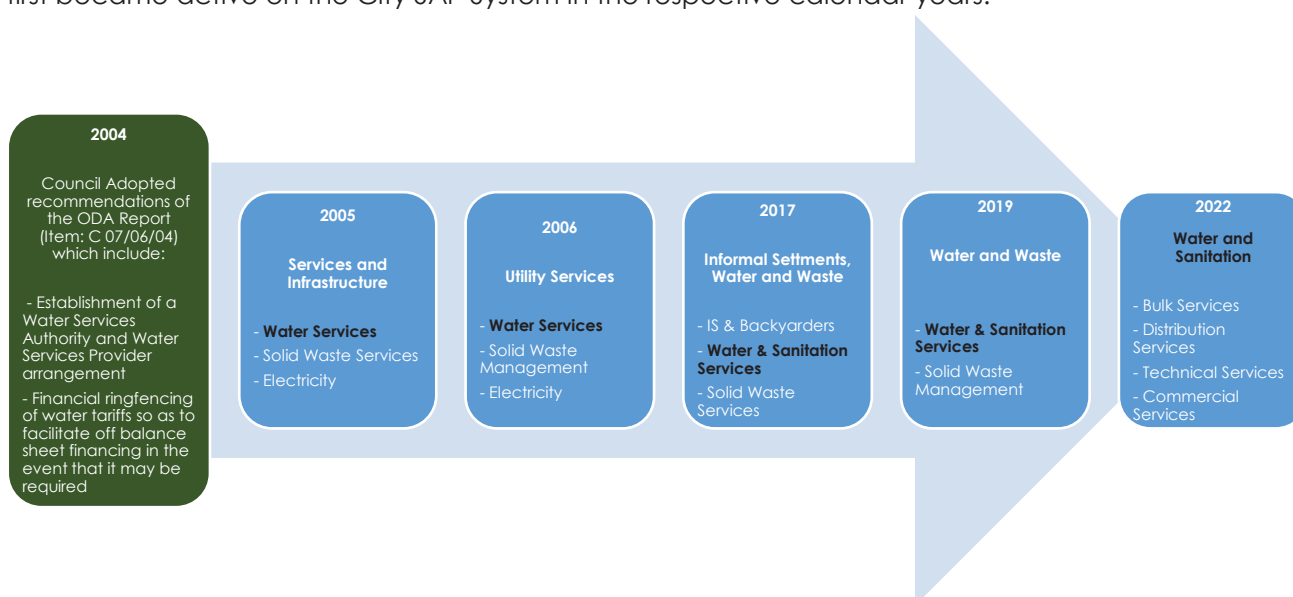


Figure 10: Chronology of macro and micro restructuring

The City will continue to improve the service delivery model to support the Water Strategy as approved by Council on 30 May 2019, and strengthen capabilities across all functions, particularly sanitation. This will include the use of technology such as advanced metering and sensors at pump stations to provide real-time data on how the water network is performing thereby improving decision-making and responsiveness.

Among the key indicators of success in the transition to a modern utility are the achievement of an integrated approach to the provision of basic services in informal settlements, network modernisation, and implementing a dedicated water and sanitation customer service function that has the capability to respond rapidly to customer complaints, service disruptions and faults. In addition, the Directorate will continue to focus on improvement, efficiencies and quality services.

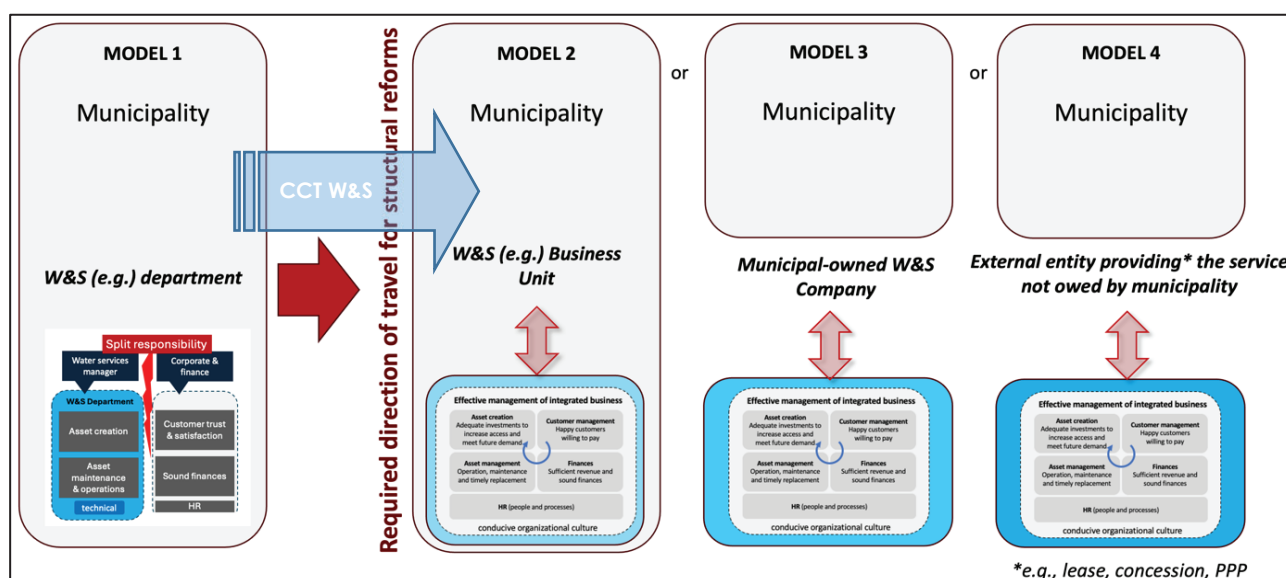


Figure 11: Direction of travel from department to managing trading service business (source Guidance Note 3: Institutional arrangements for Turning Around Metro Trading Services)

The City of Cape Town has moved from a departmental function to that of a municipal business unit and is well into Model 2. The City's macro structure is presented below to highlight Water and Sanitation's positioning in the context of the City.

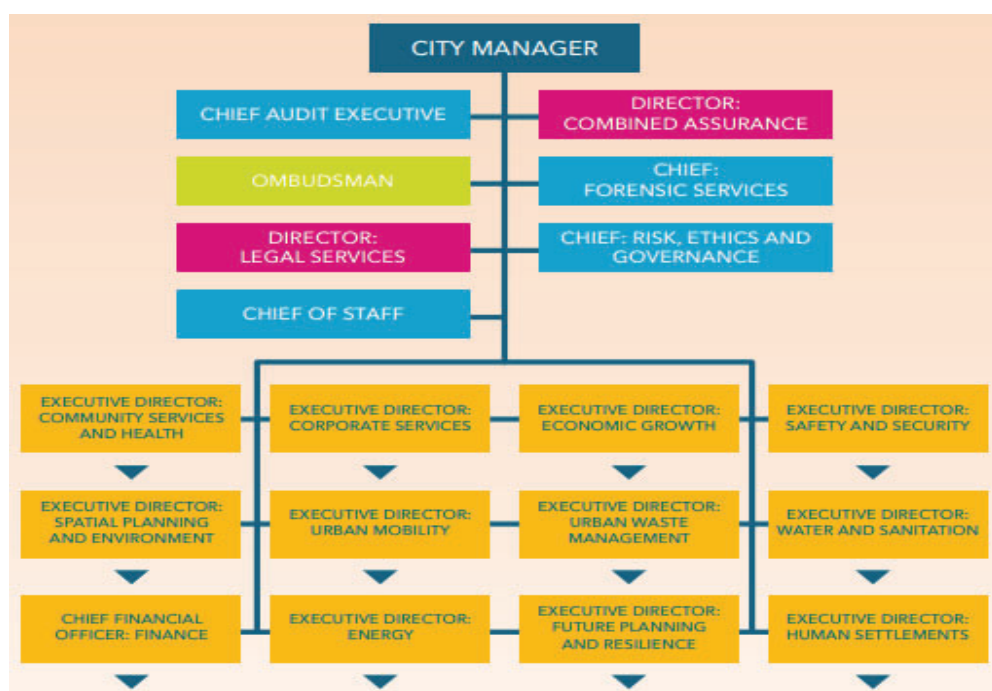


Figure 12: City Macro Organogram (Source: 2024/25 review IDP 2022-2027)

5 Key shifts to improve our service and management

5.1 City strategy implementation action plan

The Water and Sanitation directorate implements the strategies that are captured in the strategic context section to drive system-wide change across the Cape Town landscape. These strategies take their lead from the Integrated Development Plan (IDP); an inclusive blueprint for the City's objective to improve service delivery. The Water Services Development Plan refines the actions that are applicable to the water sector. The strategic plans are based on an understanding of the City's needs, drawing on input from residents, stakeholders, and a thorough assessment of its current state. By identifying and addressing key challenges, the WSD and IDP prioritises initiatives that will help Cape Town achieve its vision.

A solid foundation for economic growth requires the City to excel in essential services like water supply, and sanitation. These necessities create a more dignified environment and foster faster economic development. Water and Sanitation plays in the achievement of objectives as outlined in the IDP. Further to this, Water and Sanitation has developed plans and strategies, which details how these objectives, will be realised.

Objective 2, mainstreaming basic service delivery to informal settlements and backyard dwellings programme, focuses on continually testing and expanding on innovative technologies and approaches to improve the quality and sustainability of water and sanitation services in informal settlements.

Objective 4, which focuses on creating a well-managed and modernised infrastructure to support inclusive economic growth. The IDP highlights that “over the next five years, a key City priority will be to reform its basic services utilities to ensure that they can deliver basic services efficiently and

effectively into the future". The Utility business model reform programme will encompass "strategy development, reform of service delivery and revenue models, tariff structure reform, as well as intergovernmental collaboration and advocacy". Prioritised investment in infrastructure and excellence in basic services is accompanied by a "commitment to excellent customer engagement and timely response to service faults or complaints". This will be elaborated on further in Section 5.2.

This objective is also supported by the implementation of the 2019 Water Strategy that aims to diversify existing water resources ultimately mitigating the impact of climate change and ensuring the City is able to meet the every growing water demand as a result of future development areas and densification. A key programme under objective 4 looks at the intergovernmental collaboration initiative. This programme recognises that sustainable catchment management is critical to Cape Town's water resilience and is there to ensure the City works with the national Department of Water and Sanitation and other users to ensure improved management of the Western Cape Water Supply System.

Objective 10 aims to improve water quality and create healthy urban waterways. To ensure that this objective is met, The City has implemented a comprehensive program to enhance infrastructure and safeguard its waterways. This initiative aligns with the broader Mayoral Priority Program (MPP) and prioritizes specific projects through collaborative efforts across departments and branches.

The Sanitation and Inland Water Quality Program (S&IWQP) is a key component of the MPP. Led by Water and Sanitation, this program aims to address deteriorating water quality in the City's inland water bodies and inadequate wastewater treatment capacity, particularly in the Blaauwberg and Helderberg districts. The CSRM Branch, Reticulation and Wastewater branches, and Urban Waste Management are working together to achieve a healthy urban environment. These departments are collaborating to address infrastructure and environmental issues affecting water quality and inland water bodies.

Objective 14, emphasises the need for a concerted effort to be made to reduce energy usage over time in the wastewater, bulk water, and reticulation systems. Wastewater is the second largest energy consumer in the City and with the ever looming risk of load-shedding, Water and Sanitation needs to ensure that alternative sources of energy is investigated and implemented as far as possible. Part of this initiative led to the development of an Emergency Management Plan (EMP) for prolonged electricity outages which details the energy requirement, plans to ensure service delivery as far as possible during load-shedding but also at what existing measures Water and Sanitation has in place to offset the energy requirement from the grid. This EMP also identifies future investment that would be required for further "off-grid" solutions such as powering smaller pump stations by means of solar energy and generating hydroelectric energy from turbines at large water treatment plants, which can be fed, back into the City's energy grid.

5.2 Maintain and improve the customer, revenue value chain and cash collections

The Directorate established a long term financial sustainability plan to enable the implementation of the Water strategy as well as to plan for additional capex infrastructure projects that are required for effective service delivery. It is essential to understand the long-term tariff impacts of all costs and take action to achieve long-term tariffs that are affordable and acceptable to City Council as well as the City's customers.

This plan speaks to the effective management of revenue, by efficiently managing the existing resources to deliver water and sanitation services to the people of Cape Town. By improving customer responsiveness, cash revenue is realised and increased investment is made possible. Proper

financial planning and transparency allows for the proposed tariffs to be more palatable to all of the City's stakeholders- this again reinforces the Directorate's commitment to continuously improving its customer management. This plan takes cognisance of both the paying and non-paying customers as the City provides essential services necessary and maintains the dignity of all residents. As such, the plan makes provision through the recently developed fixed basic charge for water along with the latest approved water and sewerage tariffs to maintain and continue to improve service delivery.

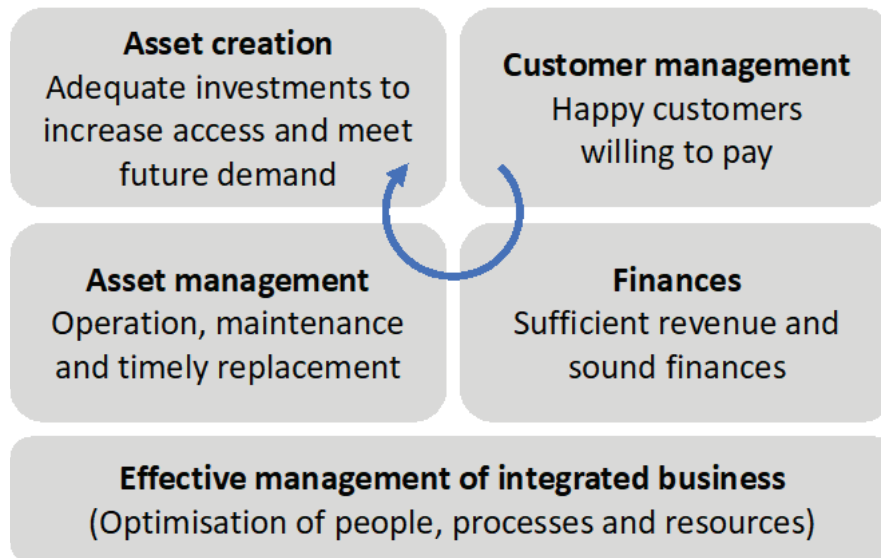


Figure 13 : Diagram indicating how effective management of an integrated business flows

The figure above forms the foundation for the way in which the City's Water and Sanitation Directorate conducts its business. The directorate's finance is audited through the Annual Audit report on the WSDP, the City's own Annual Audit report and the SDBIP scorecard reporting.

A key component in achieving improved revenue collection is accurate metering and subsequent billing. Thus the accelerated implementation/ roll out of the Automated Metering Infrastructure (AMI) programme across the City was prioritised.

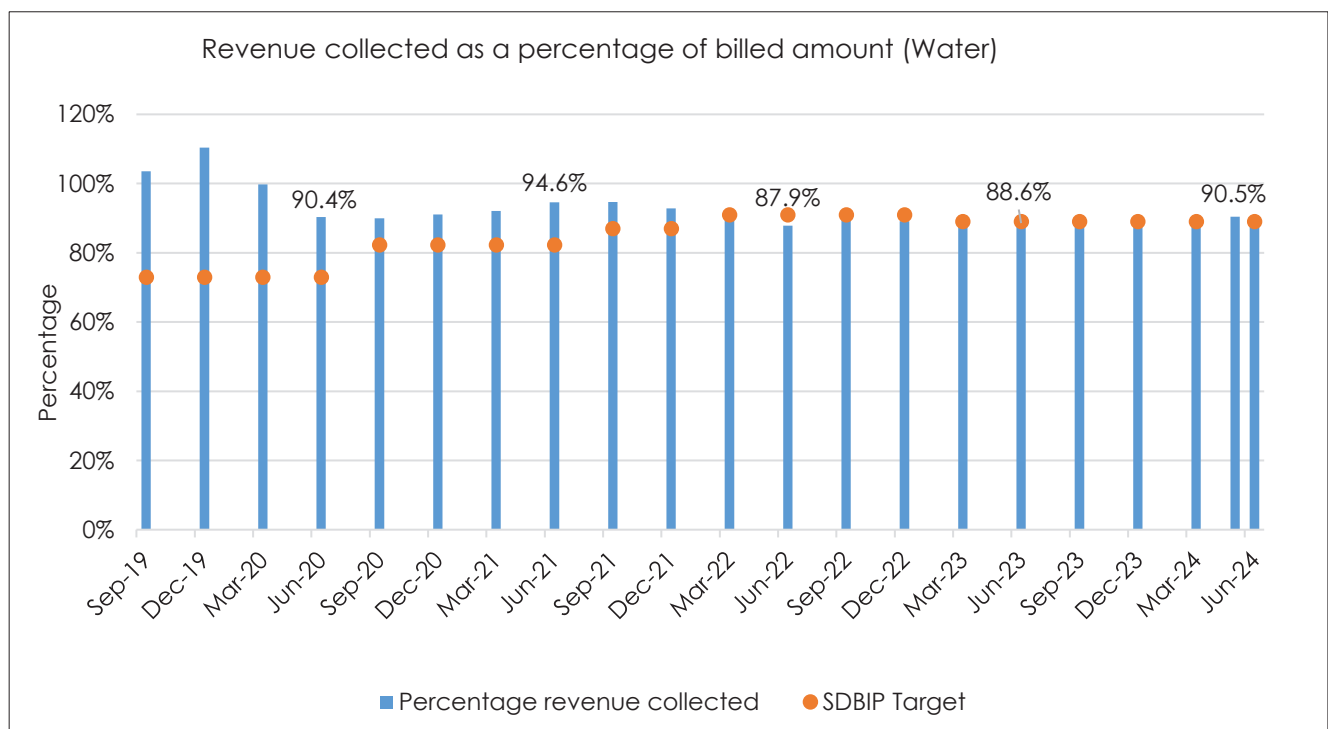
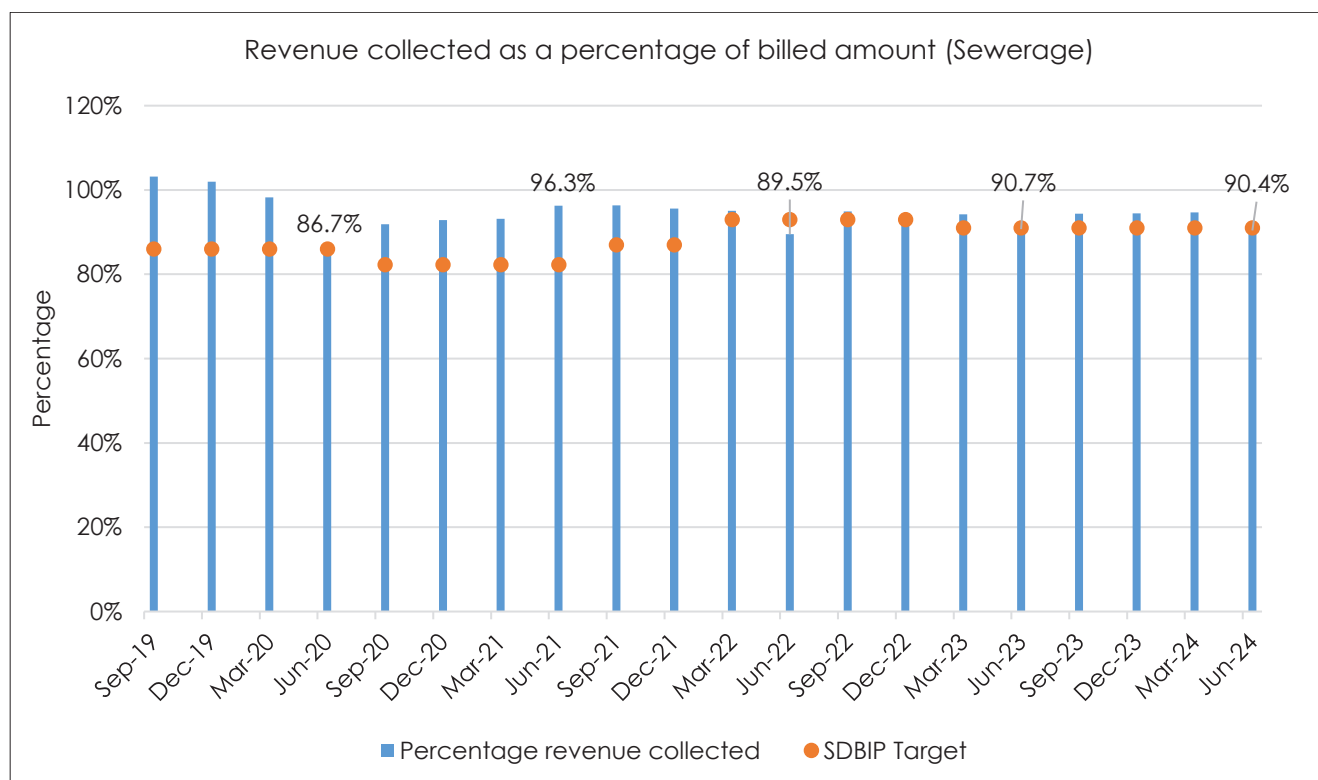


Figure 14: Graph showing 5-year trend and SDBIP Target for Water Revenue Collection**Figure 15: Graph showing 5-year trend and SDBIP Target for Sewer Revenue Collection**

5.3 Revenue model and tariff structure reform

The Water and Sanitation tariffs are in place and updated annually. Water and Sanitation tariffs is a water supply management tool used to achieve a wide range of economic, environmental, and socio-political objectives. Importantly tariffs play a dual role of mitigating the burden of water bills on vulnerable households and ensuring the financial viability of the service. The City has also continuously assessed how the tariff structure can address environmental concerns e.g. climate change shock event such as drought.

The City currently applies an inclining four-block water tariff for domestic water service and an inclining four-block tariff based on 70% of water use for domestic sewer service to all its domestic customers, uniform water and sewer tariffs for non-domestic customers, and water fixed charges to all customers based on meter size(excluding the registered and deemed indigent household). With the increasing need to maintain and upgrade the City's Water and Sanitation infrastructure it is considered necessary to maintain a two-part water tariff and to consider implementing a similar structure for sanitation, which initial reviews and assessment were initiated in 2022/23.

The City is in progress of making changes to the delivery model to support the Water Strategy and strengthen capabilities across all functions, particularly sanitation. This will include the use of technology such as advanced metering infrastructure, which is envisioned to deliver a digital water solution for the City that assures customer trust whilst contributing to water resilience into the future. Water and Sanitation is also currently installing sensors at pump stations to provide real-time data on how the sewer pump stations are performing, meter replacement and loggers on bulk meters to ensure improved accuracy of Non-Revenue Water (NRW). The City will also improve its targeting of maintenance investments and reduce the costs associated with asset failure, including failure caused by vandalism and theft. The City has achieved its reform objective of having a ring-fenced

financial service for Water and Sanitation as indicated in the attached balance sheet. Please refer to Annexure 1.

5.4 Enhancement of corporate governance for effective performance

In addressing challenges experienced such as the impact of climate change and resultant drought in 2017, the COVID-19 pandemic and its lingering effects, as well as unplanned urban growth and densification, the management and political leadership have worked together within the governance structures of the City to ensure effective decision-making on capital investment, prioritisation of pressing interventions such as the Sanitation and Inland Water Quality Programme, and to respond timeously to legislative and industry imperatives in the sector.

The City has single point of management accountability in that the Executive Director, Directors, Managers and Heads have responsibility for performance and compliance within their functional scope. This is extended to the implementation of programmes where an individual has sole responsibility. A transversal approach is often applied by the accountable programme lead where dependencies exist across the City, possibly extending to external organisations as well.

Where technical skill and functional responsibility exists outside of Water and Sanitation, the Directorate will incorporate the use of MOA's to facilitate cost effective, efficient and quality services. Currently MOA's exist between Water and Sanitation and the following departments to guide the working relationship in line with applicable service standards:

- Corporate Finance – Revenue Department
- Human Settlements (City-Owned public housing stock)
- Corporate Services – Customer Relations Department
- Community Services and Health – Environmental Health

Supply Chain Management (SCM) is a key partner in service delivery and resides in the Corporate Finance Directorate. The City has SCM policies, standard operating procedures, and delineates roles and responsibilities in support of good governance. The Water and Sanitation Directorate has also established a Capital and Contract Management Unit that facilitates any bottle necks in delivery and provides contract management support. Regular Collaboration meetings facilitated by the CFO also provides for the mutual resolution of operational and cross-cutting service delivery challenges.

The Water and Sanitation Directorate will continue to strengthen a Single Point of Accountability governance structure having progressed into the Model 2 descriptor. This will be pursued with the regular review of procedures, processes, existing MOA and providing fully transparent financial statements for the Water the Sanitation business unit.

5.5 Ramp up investment in both asset renewal and expansion

Cape Town's water use is on the rise. Daily water demand has doubled since June 2018, reaching 1000 million litres (ML) during the 2024 peak week. While the peak demand itself hasn't necessarily increased, it is lasting much longer – almost a month compared to previous years as indicated in the figure below. This could be attributed to the fact that last summer was hotter and drier than 2022/2023.

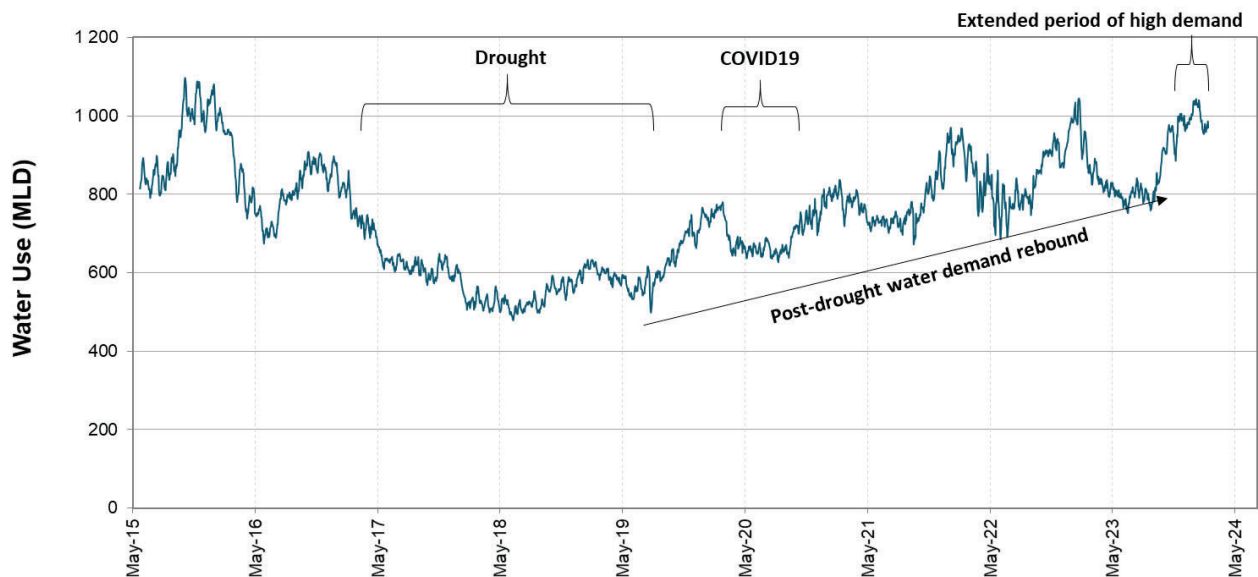


Figure 16: Overall water use by the City of Cape Town (MLD)

The Directorate's capital programme is planned with the use of a master planning exercise with a 20-year horizon. The latest master plan is based on the Landuse 2040 model (LUM2040). This land use prediction translates to an additional Average Annual Daily Demand (AADD) of approximately 465 ML/d bringing the total AADD of the City to $\pm 1\,400$ ML/d by 2040.

The figure below shows the water balance as of March 2024. The actual water demand of the City has closely followed the projected "bounce-back" curve post the low demands during the recent drought, albeit over a longer period.

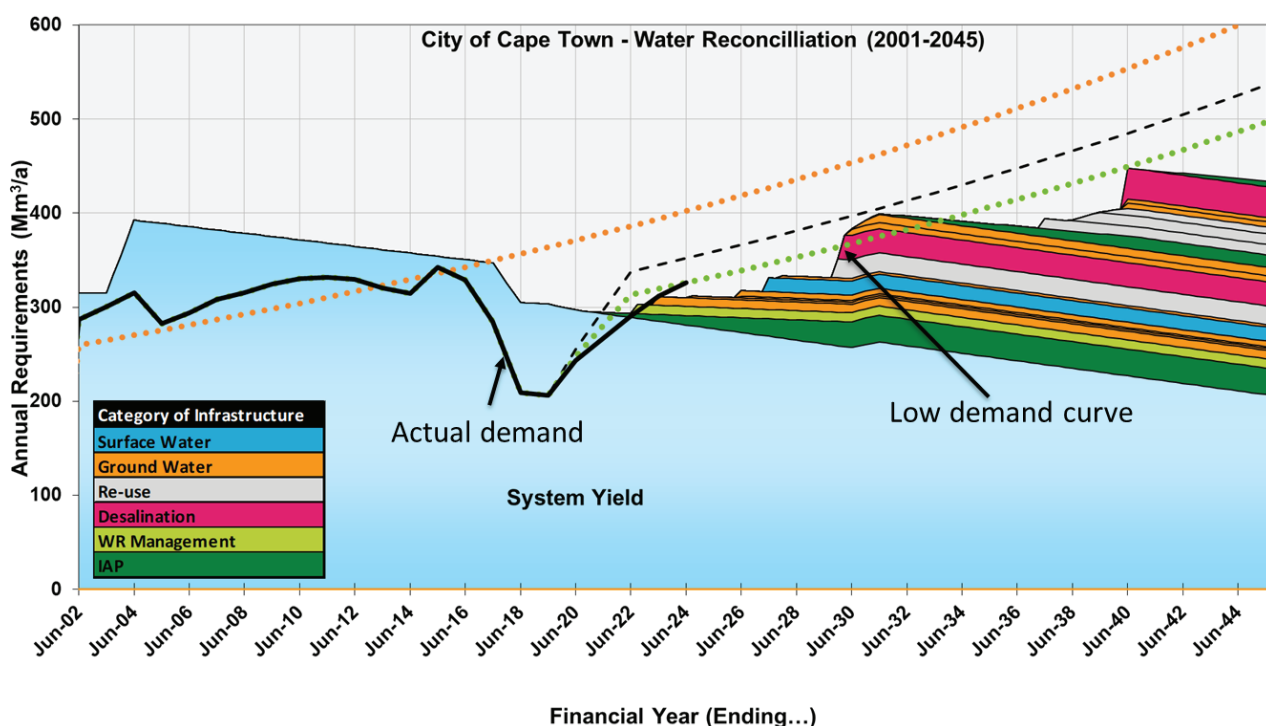


Figure 17: City of Cape Town water balance, including the New Water Programme (as per the Water Strategy with a 1 in 200 year assurance of supply and 90-percentile impact of climate change)

The growth, in not only population size but also water demand has significant implications for the operational expenditure for both production and maintenance of the WTP and WwTW. As such,

detailed condition assessment is currently under way for both WTP and WwTW to help quantify the level investment required to rehabilitate/replacement of older plants. These assessments as well as the water strategy will ensure that capital investment is made to sustain and improve the longevity of our water system.

Post the drought and COVID-19 the City decided that the economic recovery would be led by infrastructure investment. Since the 2020 there was a gearing up of the capital investment in the directorate as reflected in the 2022 – 2032 10-year budget as reflected in the graph below.

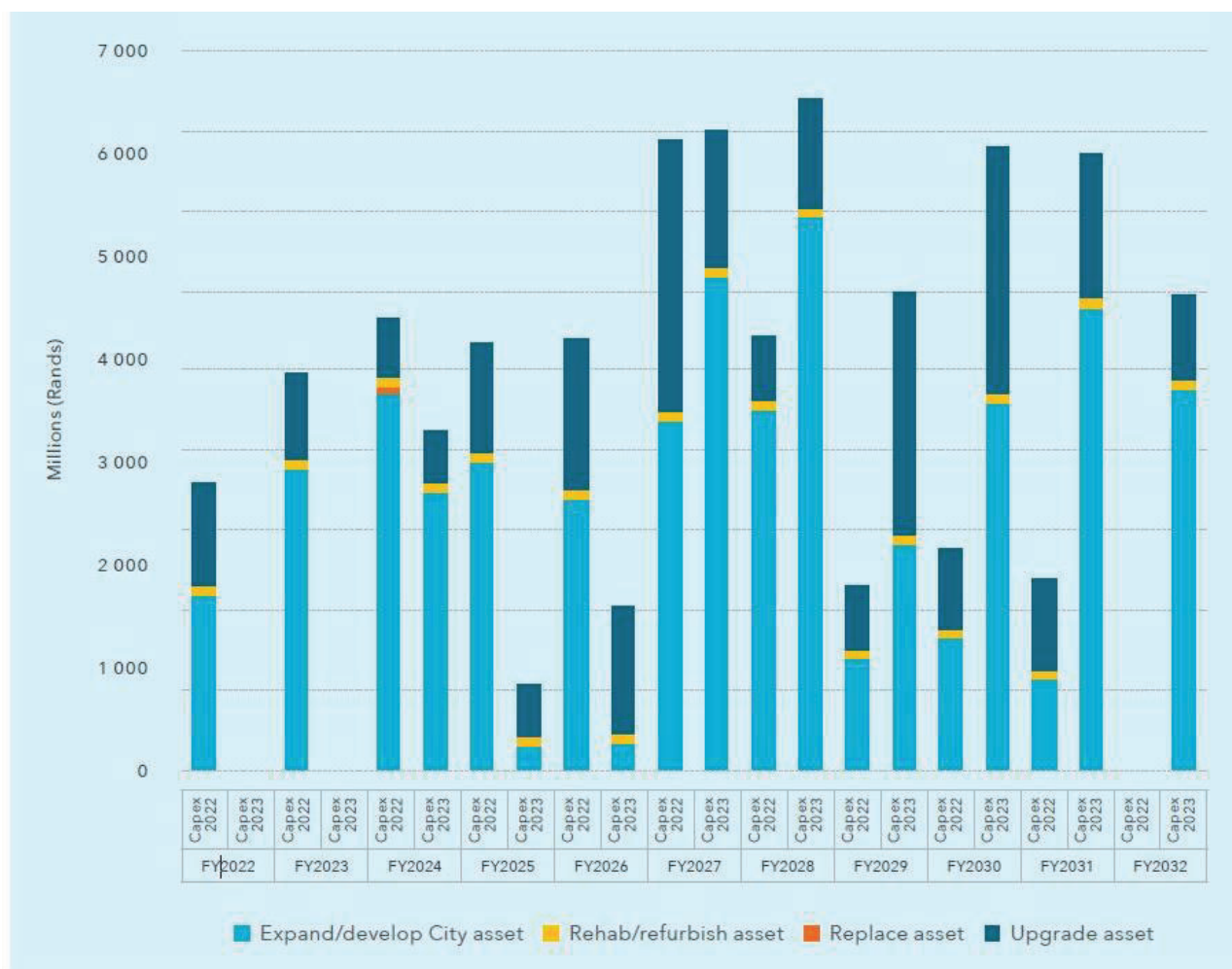


Figure 18: W&S bulk capital expenditure over the 10-year period (2022 – 2032, Infrastructure Annual Report)

The graph indicates a combined Capex /Opex budget allocation steady annual increase from less than R3 Bil in 2022 to more than R6 Bil in 2028. The expansion and development of new assets is significantly higher than that of rehabilitation and replacement. The new water programme anchored the development of the 10-capital programme and the expansion of three major WWTW namely Zandvliet, Potsdam and Macassar WWT plants to a total value of more than R13 Bil.

The budget allocation for replacement of asset does however have relatively low allocation. The 2023/24 allocation had an allocation for 100 km of pipe replacement. The intention is to ramp this by doubling the replace every year until an industry norm to replace assets of 2 % based on 50 year design life (11 023 km of water will require \pm 220 km/year). For the W&S directorate the current replacement rate is far too low. The capacity to manage pipe replace and to have the funding allocation to accelerate the programme is critical. Similarly sewer pipe replacement will have to be

addressed for a network of 9 621 km. To assist in the ramp up of pipe asset replacement a replacement prioritisation model was developed for water and sewer networks citywide.

The sewer operations are severely hampered by the deterioration of the sewer pump stations because of vandalism of infrastructure and foreign objects. Rehabilitation and maintenance of pump stations is a high value intervention requiring investment to be confined a rolling top 20 priority pump stations. The investment in standby generation was required to overcome the impact of power outage. In the height of the load-shedding period (2022-2023) a bold joint decision by the political and directorate leadership to install standby generators and/or solar panels at key infrastructure locations to limit water outages and sewer pump station and network spills. This investment also required a substantial operation cost for diesel and maintenance. Thankfully, there has been limited outages for last 20 months.

The number of ageing meters in our system and the water management device associated with high customer complaints and the change in technology have prompted a change in metering approach. The high number of estimated meter readings (59 000 = 9%) has also contributed to looking for an alternative manner in which to effectively meter the City's customers. The City is investing in the rollout of Advanced Metering Infrastructure (AMI).

This AMI initiative will benefit the City in the following ways:

- Accurate and predictable billing;
- Help with leak detection;
- There will be over 98% reading monthly, with low estimations;
- Improved water balance measurement;
- Improved access to metered information for both customers and the City;
- Improved management: leak detection, conservation, demand management, hydraulic modelling calibration and demand forecasting, improved customer relations.

The procurement process for AMI project management and AMI meter installation is under way. The current timeframe envisages the first meter to be installed and connected to the communications network in Q1 of 2025. The City is currently in a transition period to implementing AMI and will confine meter replacement on request, in response to meter failures and not proactively replace meters. The Meter Replacement Programme is confined to bulk and transfer meters (including 28 logging), which will help with getting improved reading, measurement and accuracy on water balance calculations. AMI milestones retaining to phase 1 is indicated in Annexure 2.

Table 5: Key deliverables for AMI

Package	Description	Procurement	Scope
Phase 1, project cpx.0019987: implementation March '25 to March '28			
A1	Meters phase 1	Open 3-year tender, single service provider	Supply and install approx. 130,000 smart meters and their data communication, also including the provision of a head-end system (hes) & meter data management system (mdms)
Phase 2, project cpx.0038110: implementation July '27 to July '37			

Package	Description	Procurement	Scope
A2	Meters phase 2	Open section 33 10-year tender, multiple service providers	Supply and install approx. 550,000 smart meters and their data communication

6 Implementing the way forward

6.1 Maintain and Enhance Existing Institutional Model

The Water and Sanitation Directorate to a large degree does fit a single point of accountability governance structure. This is reflected in the structure with the Executive Director (ED) which reports to the Accounting Officer being at the head of the Directorate and the next level made up of four (4) departments with their respective directors namely;

- Bulk Services
- Distribution Services
- Technical Services
- Commercial Services

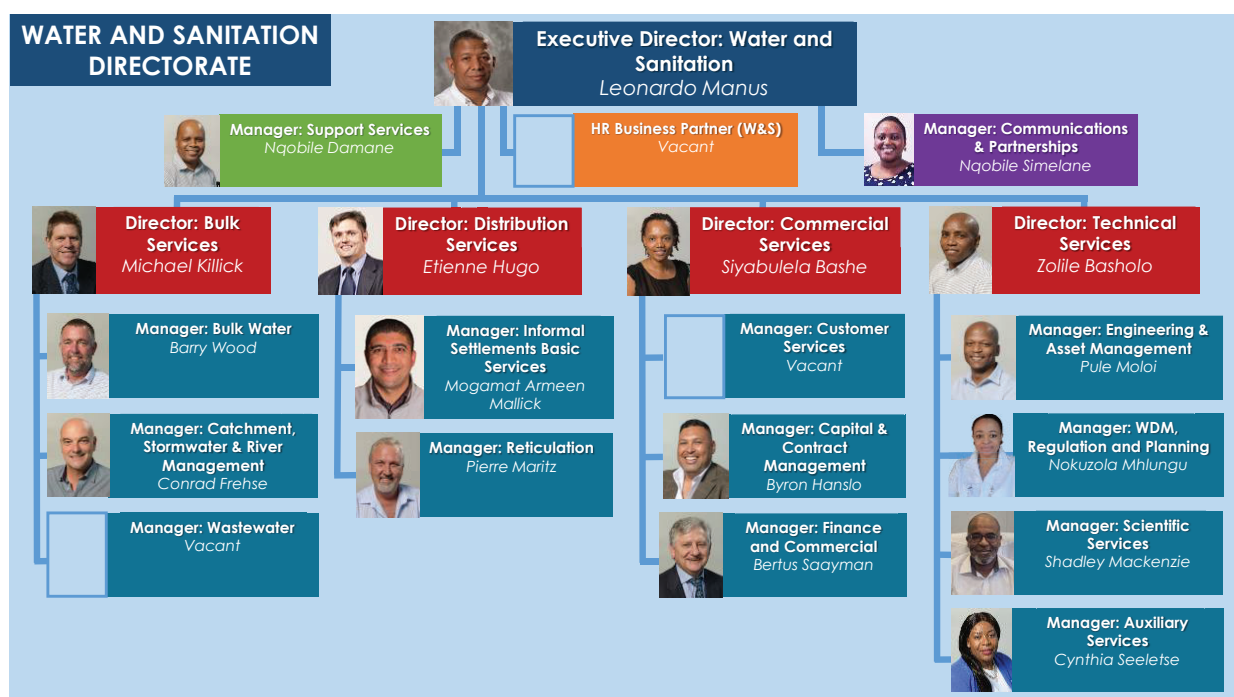


Figure 19: City of Cape Town Water and Sanitation Directorate Organogram

Each of the directors has a number of branch managers, followed by section heads with unit managers and staff pool. To further illustrate single point of accountability within the departments, e.g. Distribution Services is made up of two branches, namely Reticulation and Informal Settlement Basic Services each led by a level 3 manager. The Reticulation Branch is broken down into water distribution and sewer conveyance level 4 Managers (Heads). Reticulation is further divided into four regions each with a water and sewer regional manager as well as depots managers and operational staff. The structure is similar for all other branches but without the regional split except for Catchment Stormwater and River Management (CSRM). CSRM due to how its infrastructure serves the City remains a rates funded service.

Currently both the Corporate Call Centre and Supply Chain Management (SCM) roles are centralised with clear processes and procedures that deal with directorate matters related to SCM and Call Centre operations.

Two objectives informed the decision to centralise the Call Centre function:

- i) The Convenience factor to the customer to have one entry point to engage the city on any utility service matter
- ii) Efficiency of service delivery (not to duplicate resources for all the utility services)

Furthermore, the Reticulation Branch is responsible for running and managing the Water and Sanitation Technical Dispatch Centre (TDC) who responds to the W&S related notifications received from the Corporate Call Centre. From here it is dispatched to the responsible work centres across the metro. W&S TDC is driven by the Customer Service Level Charter to respond within 24 hours to 80% of all call outs for both water and sanitation notifications.

The above demonstrates that although the entry point is centralised, the continued service request management by the Directorate is part of the ring-fenced business of the Water and Sanitation business.

With regards to Supply Chain Management, there has been significant investment the BSC, BAC, and BEC processes with regards to staffing and training. The establishment of the Capital and Contract Management Branch (within the Water and Sanitation Directorate) and introduction of the gate review process and other key control measures have improved oversight and technical quality of the procurement processes. The ramping up of the capital budget and percentage budget spent reflects this. As part of the SCM transversal dependency-through collaboration with the Finance Directorate- performance targets are agreed upon to ensure that procurement becomes more streamlined. It is envisaged to be contractually agreed upon within an inter-directorate service level agreement, to further support the single-point of accountability within a transversal paradigm.

As referenced to above, numerous measures have been put in place over the last five (5) years to improve the effectiveness and efficiency of these corporate processes- this is an ongoing exercise. In this ongoing process to improve, single point of accountability, financial transparency and sustainability the WS Directorate will place scrutiny on corporate charges, fees, the equitable share and other similar financial transactions. The WS Directorate needs to determine whether the services received from Corporate Services (Customer Call Centre, Human Resources, Fleet, Facilities and Information Technology Services), Corporate Finance (Supply Chain Management, Revenue Service, Budget, Treasury and Grant Funding), Future Planning and Resilience (Policy and Strategy, Corporate Project and Programme Management Unit, Organisational Performance Management and Organisational Effectiveness and Innovation), Auditing and Forensic Services, and other services such as Greencape and Water Research Commission (WRC) are providing in terms of value for money.

To establish clear service level agreements with clear deliverables and frequently monitored performance the WS Directorate will review the current SLA process as well as lobby the City Manager to sub-delegate powers to the ED: WS to monitor and evaluate performance to determine whether the services meet value for money considerations, and to terminate services in instances where there is non-performance, and explore alternative mechanisms for a better service where necessary.

6.2 Enhance management and technical capability

6.2.1 HR Capacity

Training and development is seen as key to the development of capable and motivated staff. The Directorate is pursuing an in-house academy that will address skills beyond plumbing. This will provide the necessary technical competence to operate in future work environments brought about through new technology such as the roll-out of Advanced Metering Infrastructure and new projects that will require specialised skills to manage operations such as Desalination, Groundwater extraction and Water reuse. The bursary allocation and recruitment processes prioritises the sourcing of scarce skills and the City's People Management Framework delivers a set of processes and tools to ensure that the City builds and maintains staff capacity and capability. These include succession planning to prepare staff for potential positions in the future. Twinning agreements – with other countries and organisations in the context of skills transfer.

Challenges include a limited training budget that hampers implementation of the Workplace Skills Plan and Human Resources Policies and Procedures that are not optimal.

Going forward, Corporate Human Resources has initiated a review of all HR Policies and Procedures in the City. Water and Sanitation is a stakeholder and contributor in this process in order to ensure that the review facilitates improved policies that will enable service delivery in an optimal manner.

There are elements of the of the W&S business that has been out sourced such as the running of selected WWTW's, there is likely to be similar arrangements when there is new technology involved such as Bio-beneficiation (processing of sludge). Running of Desalination and Reuse plants is likely to result in arrangements in future in line with any new areas of work that the outsourcing will include a skills training/skills transfer component.

6.2.2 Data driven evidence based decision-making

Advances in technology has helped to better monitor and measure the effectiveness of our infrastructure. All aspects of the water business is becoming more data intensive and increasingly lending itself to the possibility of AI.

As in other municipalities the roll out of Automated Meter Infrastructure (AMI) has become possible and the directorate is in the initial phase of a 10 – 15 year AMI programme across the city (Section 5.5). The implications for improved meter reading accuracy, revenue collection, infrastructure planning, NRW reporting, customer relations and operations in general will be huge.

The bulk water monitoring system is able to provide a live analysis/status of the supply system with minor challenges of delayed data updates.

Currently the coverage of the water network in relation to zone and pressure management is 70 % with close to full coverage in the next 10 years. All zones are metered with a high percentage logged giving 24 hour visibility on performance. This is available on platforms and visible to all managers and relevant operations staff.

The reticulation branch has recently launched the Ignition platform that allows for 24 hour central remote monitoring of infrastructure such as water and sewer pump stations as well as reservoir levels and is likely to be extended to water distribution/pressure managed zones and Wastewater treatment process monitoring.

Increasingly more data will become available which will require analysis and processing thereby giving rise to the development of new jobs with associated skills. Data analytics / Data science is increasing giving managers more information to make informed decisions. This will speed up responses to challenges and improve service delivery and customer satisfaction.

7 Developing a new relationship with water

7.1 Safe access to water and sanitation

The Water and Sanitation Directorate strives to provide safe access to water and sanitation services for all of its residents with specific focus on improving these services across the informal settlements within the City.

The processes employed to deliver these services need to be transparent, financially sustainable, and responsive to citizen's needs- can only be achieved through extensive engagement with residents. The Directorate acknowledges the challenges associated with the water and sanitation services provision to informal settlements and its obligation to continually improve these services. The fundamental challenge is not just a technical one, but social, financial and political. Nevertheless, the City commits itself to finding better ways to provide safe water and sanitation services through processes that build dignity, trust and social cohesion.

Alternative sanitation technologies are being assessed and tested, and mechanisms to improve drainage around communal taps and mitigate floods are being investigated.

7.2 Wise use of water resources

Water Conservation Water Demand Management (WCWDM): The latest WCWDM Strategy is currently under review with its focus being to strike a long-term balance between available water resources and increasing water demand. To achieve equity and redistribution of our water resources, to ensure water security for the future and also enough water for our national economic growth and development priorities to postpone the need for expensive capital infrastructure projects for as long as it is economically viable and to minimise water wastage.

Water Demand Management primarily aims to obtain an overall reduction in the water demand across the City and does this by a proactive investment in infrastructure to achieve real loss reduction. The projects are required to minimise losses in the Bulk and Reticulation system but also save on infrastructure, chemicals and energy for required treatment. At lower pressures, the life of the reticulation system is extended. These interventions postpone the need for expensive infrastructure upgrades.

Pressure management is being implemented across the City in various configured District Metered Areas (DMAs) where the most impact can be achieved based on the calculated Infrastructure Leakage Index (ILI). Once the proposed DMA's have been finalised and implemented, the water balance model will then be developed at the zone (DMA) level.

The City has paid attention to its own infrastructure, and decreased its water demand by introducing various water conservation and water demand management (WCWDM) initiatives. Most of the maintenance activities of the Reticulation Branch also have a WCWDM impact, for example the pipe replacement programme. WCWDM initiatives include the creation and analysis of District Metered Areas (DMA's), installation of pressure relief valves in high-pressure areas, thus decreasing the quantity of water losses through leaks and burst pipes. Further initiatives implemented include the

meter replacement programme and meter audits, installation of water management devices, retrofitting, treated-effluent reuse, and consumer education and awareness.

There is an ongoing project-taking place that is a joint venture between Water Demand Management, Commercial Services and Corporate data engineers to develop a programme to assist with establishing a water balance on a zonal level. The aim is to improve on our non-revenue water (NRW) reporting by comparing the logger data and the meter data for each zone, ultimately assisting in determining if the zone is discrete and what the percentage zonal NRW is at a specific point in time. This project still requires many data clean up exercises to remove the duplicate/redundant fields- but the results this far has been positive.

Additional ways in which the Directorate is promoting the wise use of water:

- The City will use pricing to promote wise water use. As such, water will be priced with reference to the cost of providing additional supply. The Directorate currently supplies free water to informal settlements (approximately 50l/p/day) and formal households (approximately 87l/p/day) with a municipal valuation of less than R400 000. If these formal indigent households uses more than the allocated free basic amount, they are required to pay for it.
- The Directorate promotes the use of non-potable or alternative water for non-drinking purposes in line with the latest regulatory standards. This would include the use of grey water or treated effluent for construction activities and irrigation.

7.3 Sufficient, reliable water from diverse sources

The City will develop new, diverse supplies of water including groundwater, water reuse and desalinated water cost-effectively and timeously to increase resilience and substantially reduce the likelihood of severe water restrictions in future. The City is committed to increasing supply by building affordable new capacity of approximately 300 million litres per day by 2030, and in suitable increments thereafter, in a way that is adaptable and robust to changes in circumstances.

7.3.1 The New Water Programme (NWP)

The City's current water demand has surpassed pre-drought levels (1 000 Mℓ/d). This increased water demand coupled with the fact that the Western Cape has been receiving lower than average rainfall over a 12-month rolling period, highlights the importance of securing alternative water sources. It is therefore critical that the NWP be implemented on schedule to maintain Cape Town's water security. The target of achieving a good level of resilience is still possible by 2030. The scheme's latest phasing is reflected in table below.

Table 6: Water Scheme first water date and capacity

Description	Completion/first water date			
	Water Strategy	Revision: Nov 2021	Revision: Nov 2023	Capacity (Mℓ/day)
Clearing invasive alien plants			Jun-26	30
Table Mountain Steenbras Phase 1	2020	Jul-23	Jun-24	25

Description	Completion/first water date			
	Water Strategy	Revision: Nov 2021	Revision: Nov 2023	Capacity (Mℓ/day)
Table Mountain Nuweberg Phase 2	2022	Jun-35	Jun-40	15
Table Mountain Groenlandberg Phase 3	2022	Jul-35	Jul-40	12
CFA Strandfontein West	2020	Mar-23	Jun-24	6
Cape Flats Aquifer: Hanover Park	2021	Jun-23	Jun-26	4,8
Cape Flats Aquifer: Strandfontein North and East	2021	Dec-23	Dec-30	18
Cape Flats Aquifer: Philippi	2021	Jun-23	Dec-27	7,2
CFA Mitchells Plain WTP	2021	Jun-23	Jun-30	24
Atlantis Aquifer	2021	Jun-23	Jun-26	16
Berg Voëlvlei River Augmentation Scheme	2023	Jun-23	Jun-27	40
Faure New Water Scheme Phase 1 (including verification)	2024	Nov-23	Dec-29	70
Desalination Phase 1	2026	Feb-30	Feb-30	50 to 70

The timing as well as the expected yield as a result of the NWP interventions are indicated below and highlight the fact that achieving the 300 Mℓ within the anticipated timeframe as reflected in the graph below is still possible.

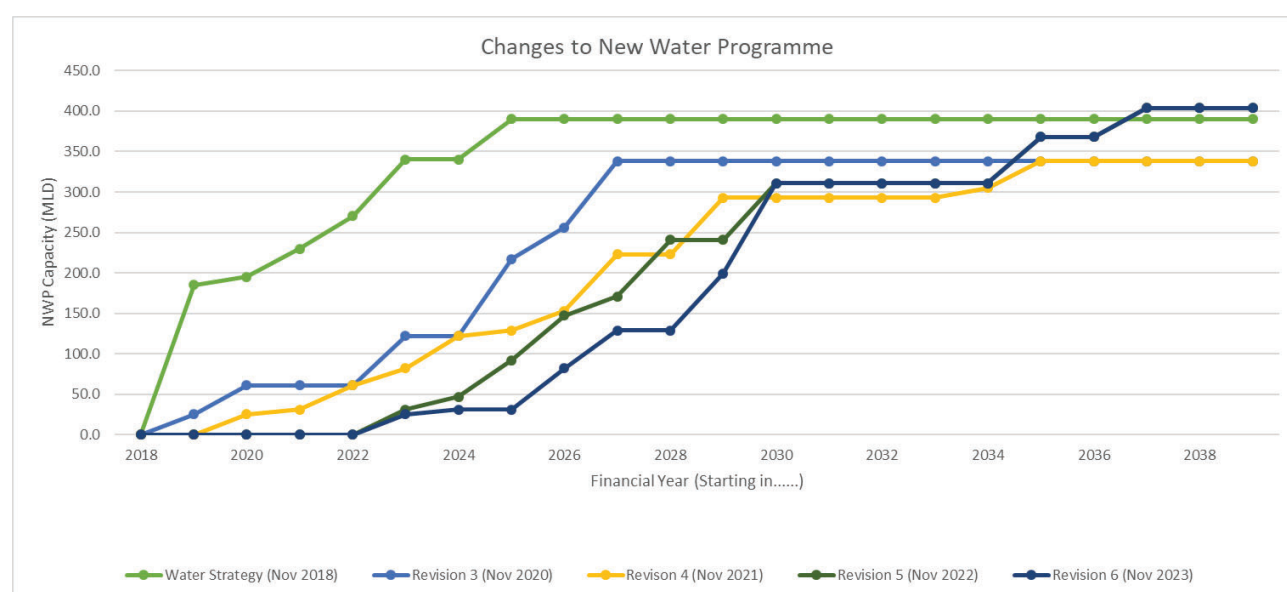


Figure 20: New Water Programme Capacity Timeline

The 6th revision (dark blue) of the NWP indicates slow delivery up to 2024, before rapidly accelerating to meet the target of 300 ML in 2030.

7.3.2 Future planning of Water Resource

Conditional assessments are being planned at five Water Treatment Plants that have no surplus capacity at peak demand. The Voëlville and Wemmershoek WTPs cannot shut down for extended periods of time. The Blackheath and Faure WTPs are fed via the Riviersonderend tunnel system, which, in the event of the tunnel failing or being out of operation for extended periods, would mean that the City would lose approximately 40% to 50% of its water treatment capacity. This is why the City plans to move away from its reliance on surface water and continue to invest in diversified water sources to increase the City's water security.

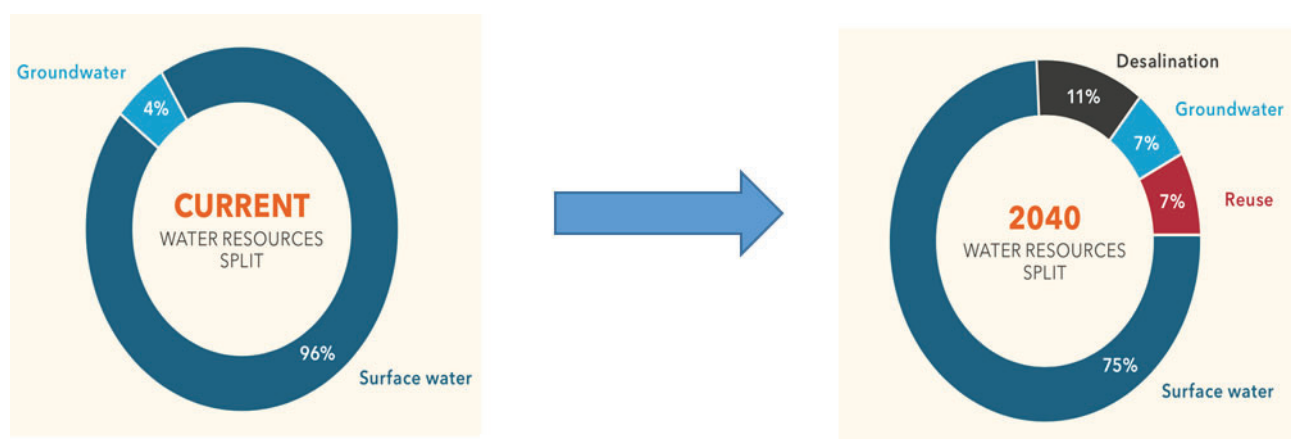


Figure 21: Water resource split as per the Water Strategy

7.4 Shared benefits from regional water resources

The City will work with key stakeholders and partners, including other urban and agriculture water users and other spheres of government, to make the most of the opportunities to optimise the economic, social and ecological benefits of regional water resources, and to reduce the risks. The City will do this through collaborative processes. The City receives a significant share of its water from the Western Cape Supply System (WCWSS)- an integrated surface water system. Water benefits people, the economy and the environment in multiple ways. All users of the system stand to gain collectively as the opportunities to maximise the benefits of water are realised. The City will work closely with the Department of Water and Sanitation who is the custodian of water resources.

A collaborative approach between all stakeholders and beneficiaries of the WCWSS will:

- enhance the integrated planning of allocations;
- improve the analytical information base for resource management;
- build stronger relationships between stakeholders by sharing expertise, infrastructure and finances to ensure better planning and cost-effective investments;
- ensure more robust and transparent management of system water resources.

7.5 A water-sensitive city

The City will actively facilitate the transition of Cape Town over time into a water-sensitive city with diverse water resources, diversified infrastructure and one that makes optimal use of stormwater and urban waterways for the purposes of flood control, aquifer recharge, water reuse and recreation, and that is based on sound ecological principles. This will be done through new incentives and regulatory mechanisms as well as through the way the City invests in new infrastructure.

The overarching vision informing this strategy is that, by 2040, Cape Town will become a water-sensitive city that optimises and integrates the management of water resources to improve resilience, competitiveness and liveability for the prosperity of the city's people. Cape Town has largely met the water supply challenge. It also manages a sewer network and treats wastewater for almost all formalised properties. However, some significant service challenges remain, as the Directorate is currently undertaking a major upgrade of its wastewater treatment facilities to improve their capacity and performance. Cape Town also experiences serious challenges with respect to flood management on the Cape Flats, and many of its waterways are heavily polluted. The transformation of Cape Town into a water-sensitive city will be challenging and is a medium-term objective.

As part of this transition, the responsibility for stormwater management has already been moved across from the Roads Department to the Water and Sanitation Directorate. The mechanisms at the City's disposal to facilitate and influence this transition are rates and service charges, land use permissions, planning requirements and by-laws, and direct investment in infrastructure.

8 Conclusion and next steps

The CCT WS Directorate represents the entity Model 2 and currently reflects this definition due to the following:

- Single Point of Accountability is reinforced by the Directorate Management Structure while SCM and Call centre processes are managed centrally.

The Directorate is confident that the establishment of the Contracts and Contract Management Branch as well as the Technical Dispatch Centre will continue to improve efficiency of procurement and customer service.

In improving Single Point of Accountability, financial transparency and sustainability, the WS Directorate will place scrutiny on corporate charges, fees, the equitable share and other similar financial transactions.

In strengthening the Single Point of Accountability, the ED: WS needs to enter into service level agreements with clear deliverables and frequently monitored performance. The WS Directorate will review the current SLA process as well as lobby the City Manager to sub-delegate powers to the ED: WS to monitor and evaluate performance to determine whether the services meet value for money considerations, and to terminate services in instances where there is non-performance, and explore alternative mechanisms for a better service where necessary.

Tariff setting in future will increasingly reflect a larger size of the funding requirements of the service in the context of the economy and indigent register requirements. Development Contributions is an important income contribution to claw back value of up front infrastructure investment by the Directorate. This will be periodically reviewed to ensure that the contributions remain in line with cost of infrastructure.

The ring fencing of tariff income remains a policy requirement while Catchment Stormwater and River Management (CSRM) to remain rates based service and its inclusion in the directorate will remain a strong impetus to achieving a water sensitive city by 2040.

The directorate is financially self-sufficient with an exception of rates funding under an emergency as in the case of the drought period, which required special permissions with full transparency and oversight.

There is clear evidence that the city regards the growth of infrastructure and maintaining our core service is important. Densification is embraced requiring significant investment in the rehabilitation and upgrade of existing infrastructure in line with the MSDF.

The existing strategies, plans and budget shows direct alignment with the IDP and WSDP.

The Directorate management and political leadership in practice show and acknowledge the water services challenges and a joint resolve plan for and address them.

Lastly, the City will develop a document that defines the financial relationship between the Water and Sanitation Service and the City.

Next Steps include:

What	Who	When
Regular feedback on the implementation of the Water Strategy through the Outlook report	Bulk Services Department	Annually
Develop a Water and Sanitation Strategy (a beyond 2030 Water and Sanitation strategy)	ED, All Departments	End FY 2027, then every 5 years
Review and Update of the Asset Management SOP's	ED, Technical Services Department	End FY 2025
Ongoing Quarterly Asset Management Steer Com	Technical Services Department	Quarterly
WCWDM Strategy Update	Technical Services Department	End FY
AMI progress report	Customer Services Department	Annual Update
W & S Directorate separate (from the City) and independent Audited Financial Statement produced and published	ED, Commercial and Financial Services Department	End FY 2025, then annually
Development of W&S SLA agreements with all Corporate Directorates and other service providers to intentionally strengthening single point of accountability. This will include close scrutiny of corporate services	ED, Technical Services	End FY 2027, draft and complete outstanding SLA's
Mechanism for Performance monitoring and evaluation of SLA's put in place	ED, Technical Services	End FY 2027
Lobby the CM to subdelegate powers to effectively manage SLA's	ED	End FY 2025
Ongoing monthly Collaboration meetings with the CFO, chaired by the W&S ED – regarding the Reform Plan /Process	ED	Quarterly
Develop a document to define the financial relationship between WS Directorate and City (addressing financial transparency)	ED, Commercial Services	End FY 2026

Annexures

Annexure 1

Budget: Income and Expenditure Statement: All Costs - Extract from SAP

Tariff Funded:

Profit Center/Group WATER_SERV Water & Sanitation Tariff Fund

Profit and loss accounts	2024 V1	2024 Actuals	2025 V1	Comment/Explanatory note
** Sanitation Service Charges	2 278 047 741.40-	2 416 265 428.49-	2 547 558 135.26-	Higher than budgeted due to extended summer
** Water Service Charges	4 436 980 028.30-	4 843 586 877.04-	4 998 348 957.92-	
*** Rental of facilities and equipment	226 255.00-	271 012.43-	239 604.00-	
*** Interest earned - outstanding debtors	205 380 000.00-	223 749 822.35-	229 620 000.00-	
*** Fines, Penalties and Forfeits	115 500.00-	3 023 396.79-	185 854.49-	
*** Transfers and Subsidies	1 286 602 985.00-	1 265 683 599.86-	1 392 364 407.00-	
*** Capital Transfers and Contributions	380 899 138.00-	362 587 011.56-	347 899 261.00-	
*** Other Revenue	108 295 578.00-	127 328 451.27-	120 732 601.41-	
*** Gains	4 543 526 126.39-	5 055 524 937.90-	5 397 878 583.69-	Relates to Water Inventory
**** Income External - Primary	13 240 073 352.09-	14 298 020 537.69-	15 034 827 404.77-	
** Internal Utilities Revenue	654 108 909.15-	613 653 541.96-	666 985 086.58-	
** Bulk Charges Revenue	1 647 019 691.35-	1 816 609 658.13-	1 987 024 429.18-	Relates to Internal Wastewater Treatment
*** Insurance Departmental Premiums Received		10 668 117.80-		
**** Income Internal - Secondary	2 301 128 600.50-	2 440 931 317.89-	2 654 009 515.76-	
***** Total	15 541 201 952.59-	16 738 951 855.58-	17 688 836 920.53-	

Cost Center/Group WATER_SERV Water & Sanitation Tariff Fund
Cost Element Group CITY_EXP Income Statement Expenditure

Cost elements	2024 V1	2024 Actuals	2025 V1	Comment/Explanatory note
***** Employee Related Cost	2 689 199 646.31	2 393 254 345.62	2 692 130 003.95	
***** Debt Impairment	629 907 999.84	727 803 837.64	596 604 000.04	
***** Collection Costs	2 895 959.52	7 726 883.67	2 895 959.50	
***** Depreciation & asset impairment	670 275 318.52	708 170 062.06	803 803 537.79	
***** Contracted Services	1 249 972 354.35	1 270 183 147.43	1 342 015 694.38	
***** Transfers and Subsidies	30 450 000.00	28 216 517.87	28 328 492.00	
***** Other Expenditure: Inventory	4 128 223 031.35	4 829 071 787.43	5 012 513 903.86	Relates to Water Inventory Consumed
***** Other Expenditure	692 369 032.65	803 201 374.60	827 414 681.58	
***** Losses	558 525 927.82	360 327 019.52	562 643 963.45	
**** Repair & Maintenance Primary Cost	869 659 303.04	1 059 382 525.90	1 021 923 252.71	
**** Oper Grants & Donation Projects: Primary	46 092 000.00	24 790 739.07	59 239 929.00	
***** Insurance Fund	1 071.19	7 322.89	1 071.19	
***** Expenditure External - Primary	11 567 571 644.59	12 212 135 563.70	12 949 514 489.45	
**** Appropriation to Reserves	46 286 076.00	50 241 713.74	72 213 388.00	
**** Depreciation Offsets	159 824 821.55-	176 606 535.56-	180 716 712.60-	
**** Other Appropriation Adjustments	380 956 828.00	369 957 893.27	347 899 261.00	Including Capital Receipts
***** Appropriations	267 418 082.45	243 593 071.45	239 395 936.40	
**** Repair & Maintenance Secondary Cost	689 803 486.94	664 390 138.03	726 371 844.81	
**** Oper Grant & Donation Project: Secondary		230 945.79	2 020 092.00	
***** Expenditure Internal - Secondary	689 803 486.94	664 621 083.82	728 391 936.81	
**** Internal Utilities Expenditure	265 327 311.85	264 123 558.45	297 232 662.61	
**** Bulk Charges Expenditure	1 647 019 691.35	1 816 609 709.90	1 987 024 429.18	Relates to Internal Wastewater Treatment
**** Interest Internal Borrowings	993 731 615.63	916 938 406.54	1 370 058 812.11	
**** Insurance Departmental Premiums Expense	35 537 317.00	38 329 207.94	43 375 680.80	
*** Activity Based Costs to Capital Account	332 614.97-	142 091.44-	4 729.04-	
*** Activity Based Costs to Operating Acc	672 581 741.22-	629 387 040.93-	724 158 551.82-	
**** Support Services	747 707 158.97	729 936 401.33	798 006 254.14	
***** Internal Charges - Secondary	3 016 408 738.61	3 136 408 151.79	3 771 534 557.98	
***** Over/underabsorption	15 541 201 952.59	16 256 757 870.76	17 688 836 920.64	

Rates Funded: (included in the Water and Sanitation Total Budget but Rates Funded)

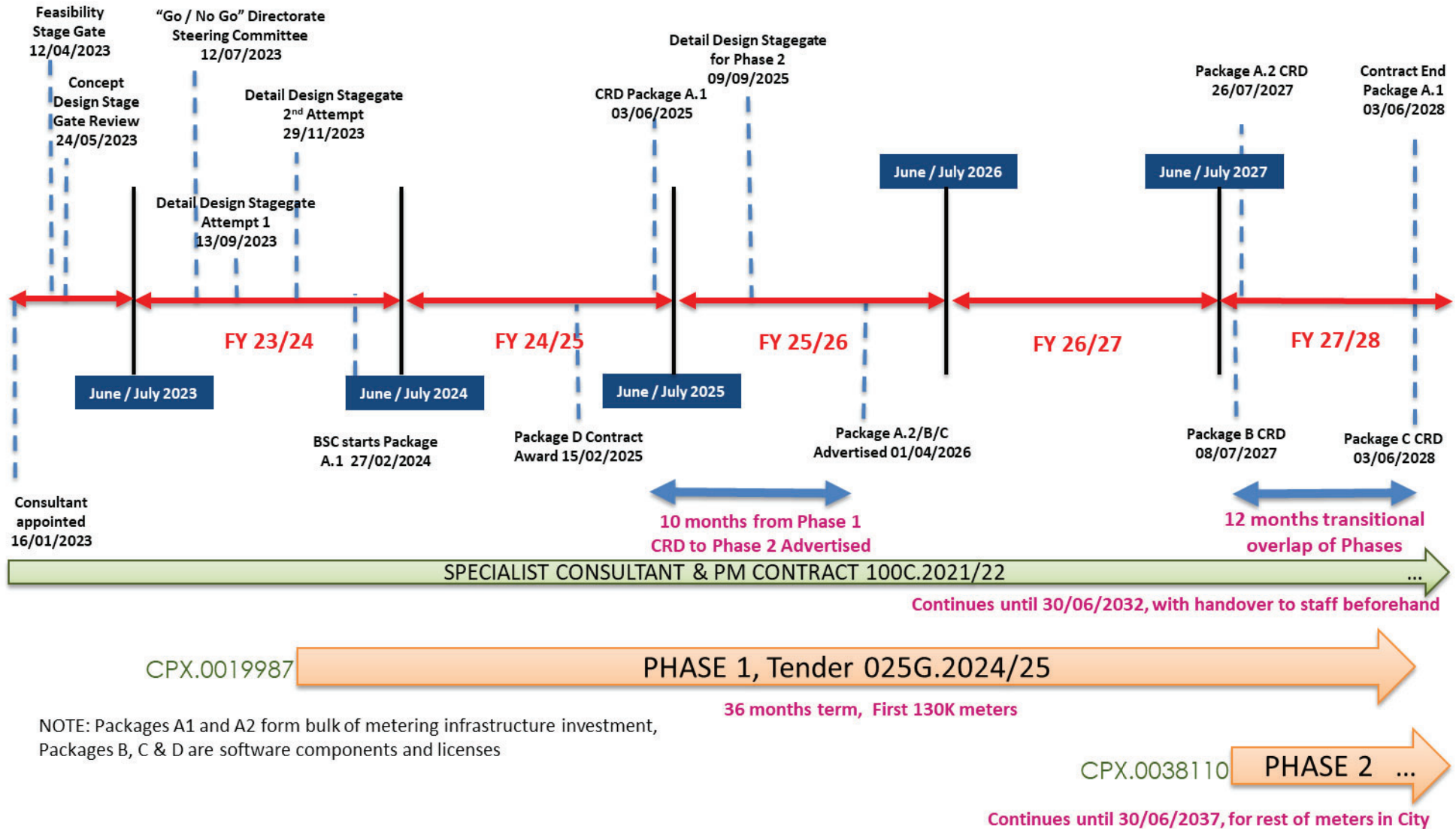
Cost Center/Group 20040320 Catchment&Stormwater
Cost Element Group CITY_EXP Income Statement Expenditure

Cost elements	2024 V1	2024 Actuals	2025 V1
***** Employee Related Cost	59 833 993.34	56 240 470.57	69 066 875.00
***** Depreciation & asset impairment	2 531 379.65	3 105 271.46	4 685 353.43
***** Contracted Services	16 823 248.40	15 117 508.51	17 206 723.88
***** Transfers and Subsidies	3 000 000.00		3 000 000.00
***** Other Expenditure	1 945 991.62	1 507 998.33	1 940 380.82
**** Repair & Maintenance Primary Cost	96 296 899.44	92 458 558.37	101 048 925.26
**** Oper Grants & Donation Projects: Primary		3 299 305.93	
***** Expenditure External - Primary	180 431 512.45	171 729 113.17	196 948 258.39
**** Appropriation to Reserves		171.14	
**** Depreciation Offsets	264 482.22-	411 099.57-	434 839.81-
**** Other Adjustments	44 311 993.00	32 670 209.57	28 343 021.00
***** Appropriations	44 047 510.78	32 259 281.14	27 908 181.19
**** Repair & Maintenance Secondary Cost	557 616.48	408 275.31	570 111.52
***** Expenditure Internal - Secondary	557 616.48	408 275.31	570 111.52
**** Internal Utilities Expenditure	5 918 310.09	29 243 535.76	23 524 925.51
**** Interest Internal Borrowings	25 158 268.40	15 632 292.93	34 194 374.34
**** Insurance Departmental Premiums Expense	162 059.00	170 956.50	174 986.47
*** Activity Based Costs to Operating Acc	5 999 935.16	11 745 317.03	5 550 011.76
**** Support Services	40 712 935.00	40 501 473.47	37 722 884.19
***** Internal Charges - Secondary	77 951 507.65	97 293 575.69	101 167 182.27
***** Over/underabsorption	302 988 147.36	301 690 245.31	326 593 733.37

Note: The abovementioned tables are unaudited.

Annexure 2

AMI PROGRAMME MILESTONES (2022/23 to 2036/37) - with a focus on Phase 1



Annexure A1

CITY OF CAPE TOWN

WATER AND SANITATION

REFORM STRATEGY

2024

ANNEXURE A1

Water & Sanitation Institutional Road Map

(IRM)

Version 3.0: 22 January 2025

Please note that some confidential content has been redacted to make this document suitable for publication.



CITY OF CAPE TOWN
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STAD KAAPSTAD

Making progress possible. Together.

APPROVAL


Name	Designation	Signature	Date
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1 Introduction

This A1 submission must be read in conjunction with the Reform Strategy approved by Council on 25 September 2024. Further to the Reform Strategy, this document confirms that the Water and Sanitation (WS) Directorate's governance framework currently represents Model 2 as per the guidance note on Single Point of Management Accountability and highlights its commitment to continuous improvement in service delivery through a business-oriented approach. In the short to medium term, this governance structure will most likely remain in place pending the review of centralized and decentralised services. The Directorate will review the governance arrangement periodically and make changes when required to further drive Single Point of Management Accountability. The WS Directorate recognizes that improvements in water services delivery are necessary, particularly in procurement, human resources, and operational efficiency. Even in areas where the Directorate is doing well, it acknowledges challenges and is committed to addressing them as part of its goal to continuously improve service delivery.

This document outlines the steps for reviewing service delivery mechanisms and improving procurement, human resources, and operational efficiency, with clear targets, timelines (where applicable), as well as responsibilities.

The Directorate acknowledges that to qualify for the incentive USDG component of the grant, continued ring-fencing of income and full financial transparency will be required. Steps to achieving this transparency on the road to long-term sustainability in terms of growth and maintenance of the core water service is outlined. Transparency and single point of accountability will be reinforced by producing independent WS Directorate audited financial statements from the end of financial year 2025. CSR, which is rates funded and any other details of the financial relationships with City's corporate departments will be reflected.

Transversal management aspects of the business remains important to coordinate and monitor the interdependency aspects of all steps in the water services value chain.

2 Single Point of Accountability

2.1 Overview of current management structure

The City of Cape Town as it is known today, was formed in December 2000, by combining the Cape Metropolitan Council with the six local councils of Helderberg, Oostenberg, Tygerberg, Blaauwberg, Cape Town, and South Peninsula, as well as parts of the West Coast and Winelands districts. In 2004, a high-level review of the Internal Business Units project recommended creating a Water Services authority and a Water Services Provider arrangement, along with financial ring-fencing of the water tariffs. The City has already made significant progress towards a Single Point of Management Accountability through implementation of the above-mentioned recommendations.

More recently, the adoption of the Water Strategy in 2019 necessitated a restructuring of the management to ensure prompt and efficient compliance with legislative requirements. The City of Cape Town has since transitioned from a departmental function to a municipal business unit and has made significant progress toward implementing Model 2 as per the guidance notes.

As indicated in figure 19 of the City of Cape Town Water and Sanitation Reform Strategy, the creation of the four (4) Directors within Water and Sanitation, has aided the shift to Single Point of Accountability. Each Director must ensure that key objectives and deliverables for its department are met and in line with customer needs as well as Council strategies and policies. This is illustrated in Figure 1 outlining the structure after the establishment of the Water and Sanitation Directorate.

The City has taken initial steps towards single point of management accountability in that the Executive Director, Directors, Managers and Heads have responsibility for performance and compliance within their functional scope.

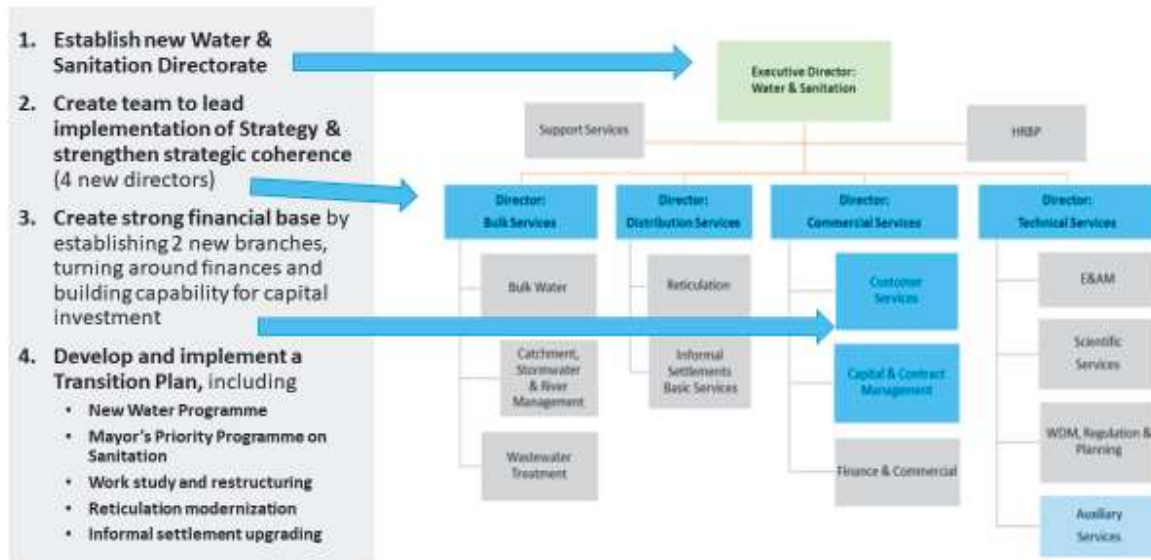


Figure 1: Transitioning to a Modern Utility

The implementation of the Water Strategy (2019) introduced major changes to the management structure that instituted a change management approach to achieve City objectives outlined in the Water Strategy namely, Transitional Programmes with accountable leads. Building on these changes the directorate will finalise implementation of Transition Plans 7 and 8 (Continuous improvement and organisational renewal) which are still to be concluded. The WS directorate will also introduce a programmes to drive change management as per the Action Plan of the Reform Strategy. The implementation of all three planning documents (A, A1 and A2) including Action Plans for the WS Reform Strategy will assist in getting to single point of accountability to reinforce and strengthen Model 2, covering all aspects outlined in the Seven-box framework for successful trading services (NT Guidance Note 3: Institutional Arrangements).

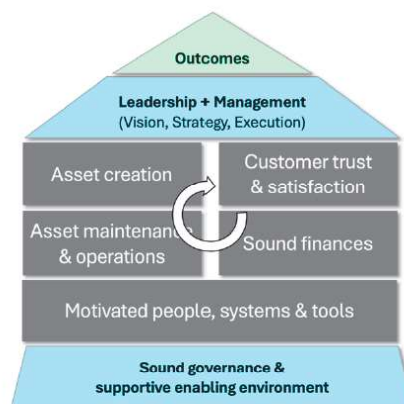


Figure 2: Seven-box framework for successful trading services

Applying the 7-box model to the City of Cape Town's core water and sanitation utility functions:

7 Box Model Category	7 Box Model Category Responsibility / functionality	Assignment of Responsibility as per National Treasury Guidance Note	Current State of Water and Sanitation Directorate in Cape Town
Accountability	Separate Trading Service	Entity or Business Unit	Separate Utility Directorate <i>Further review required to achieve SPoMA</i>
	Reports to Accounting Officer for business unit (City Manager)	Business Unit Head	Executive Director: Water and Sanitation
	Political Oversight	Business Unit Specific	Water and Sanitation Portfolio Committee Advisory Committee: Water Quality in Wetlands, waterways and the coastal environment - Permit advisory Forum Mayoral Committee Member for water and Sanitation
	Full trading service operations reports to Executive Director	Decentralised	Some services are centralised and performed by corporate <i>Further review required to achieve SPoMA</i>
Human Resources	Development of HR policies that are in line with national regulations and develop systems to ensure compliance	(not mentioned in Guidance note)	Corporate
	Ensure compliance with Council HR policies and national regulations.	Corporate/HR Business Partner ensures that HR policies and processes are complied with	Business Unit
	Responsible for recruitment;	Business Unit	Business Unit T13 and below positions was recently delegated to WS Directorate. The next step will be to sub-delegate the filling of T14 and above positions that are currently done by Corporate HR
	Attending disciplinary cases;	Business Unit	Business Unit
	Payment of employees;	Business Unit	Corporate <i>Further review required to achieve SPoMA</i>

	Management of employee pay and leave; and	Business Unit	Business Unit
	Talent management and staff training, as well as organisational design.	Business Unit	Business Unit
IT, Fleet, Facilities	Ensure compliance with all relevant policies and regulations, through effective oversight.	Corporate	Corporate
	Manage requirements within policy	Business Unit	Business Unit
	Procure, allocate, maintain assets	Business Unit	Business Unit
Customer Services	A dedicated call centre that is closely linked to the back-office teams, as well as the business unit management, provides a responsive and effective level of customer service. Customer services staff from each trading service would also work from corporate customer services centres but be accountable to the trading service.	Business Unit	<p>The City has a centralised call centre that receives service requests. The Reticulation Branch within the WS Directorate is responsible for managing and operating the Water and Sanitation Technical Dispatch Centre (TDC) that responds to all W&S related notifications received from the Corporate Call Centre. The above demonstrates that although the entry point is centralised, the continued service request management by the Directorate is part of the ring-fenced business of Water and Sanitation. The ED: WS is accountable for the responses to these faults and service requests which are tracked and reported to relevant committees.</p> <p><i>Further review required to achieve SPoMA</i></p>
Finance	Raising consolidated bills to customers;	Corporate	Corporate
	Managing the corporate bank accounts,	Corporate	Corporate
	Raising loans and undertaking investments;	Corporate	Corporate
	Consolidating the financial statements of the trading services into the corporate municipal accounts at year-end;	Corporate	Corporate

	Ensuring the devolved finance operation complies with corporate financial policies; and	Corporate	Business Unit supported by Corporate
	Publishing full trading services AFS statements annually, and aggregated within metro AFS.	Corporate	Corporate
	Critical revenue value chain functions including meters and metering, and management / oversight of credit control;	Business Unit	Metering and Revenue Protection: Business Unit Credit Control Oversight: Corporate <i>Further review required to achieve SPoMA</i>
	Creditors payment;	Business Unit	Business Unit authorises payments, corporate maintains the system
	The production of management accounts,	Business Unit	Corporate Accessed by Business Unit through SAP <i>Further review required to achieve SPoMA</i>
	Engaging with internal and external audit queries;	Business Unit	Business Unit
	Posting of entries into the accounts;	Business Unit	Business Unit handles the SAP postings, and oversight responsibility lies with Corporate <i>Further review required to achieve SPoMA</i>
	Maintaining assets registers, etc; and	Business Unit	Business Unit
	Preparation and sign-off of WS trading service AFS.	Business Unit	Corporate <i>Further review required to achieve SPoMA. City is exploring preparation by Corporate together with WS directorate, with a final sign-off by trading service.</i>
Supply Chain Management	Ensure compliance with all relevant policies and regulations, through effective oversight; and	Corporate	Corporate Water and Sanitation Capital and Contract Management branch provides oversight on behalf of the ED: WS to ensure compliance with legislation and City policies

	<p>Bid Adjudication committee (handling of reports from the trading service).</p> <p>This committee comprises of various representatives from different directorates and is chaired by line.</p>	Corporate	The committee is independent and Corporate Finance plays a secretariat role.
	Bid Specification Committee and Bid Evaluation Committee	(not mentioned in Guidance note)	Business Unit and Corporate Finance plays an oversight role
	Manage stores;	<p>Business Unit</p> <p>WS has stores for operations and infrastructure component</p> <p>The common goods are kept at Corporate Stores eg. toilet paper</p>	<p>Corporate Business Unit sets technical requirements (specifications, minimum stock levels, etc)</p> <p><i>Further review required to achieve SPoMA and institute SLAs for common goods</i></p>
	Procurement, (setting up and service); and	Business Unit	Business Unit
	The preparation of reports for consideration by the bid adjudication committee.	Business Unit	Business Unit

To fully establish the single point of accountability held by the ED: Water and Sanitation, the directorate commits to undertake a review of all shared services and centralised functions, with a particular focus on those noted above for review. The Water and Sanitation Utility review will be undertaken by the City to evaluate these services, processes, and functions using a framework for accountability. Where found to not support the establishment of a single point of accountability, an options analysis of different operating models and related recommendations will be taken to the City Manager to consider for implementation. Importantly, the recommendations implemented will be institutionalised through being captured in internal policies, standard operating procedures, and other mechanisms to provide a level of safe-guarding these reforms.

Furthermore, the establishment of enhanced accountability through the City Manager by sub-delegating powers to the ED to monitor and evaluate performance, and review services performed by corporate functions on a regular basis going forward. This sub-delegation would also include the authority to terminate services in cases of non-performance and to explore alternative mechanisms for improved services where necessary. Regular review will allow the City to continue to enhance and advance accountability and not have it be a once-off reform.

Lastly, Water and Sanitation will explore the pulling together of all corporate support functions within the directorate, as part of the shared services and centralised functions review, with due consideration of the SPoA: Trading Services institutional model as outlined in USDG Guidance Note 3:

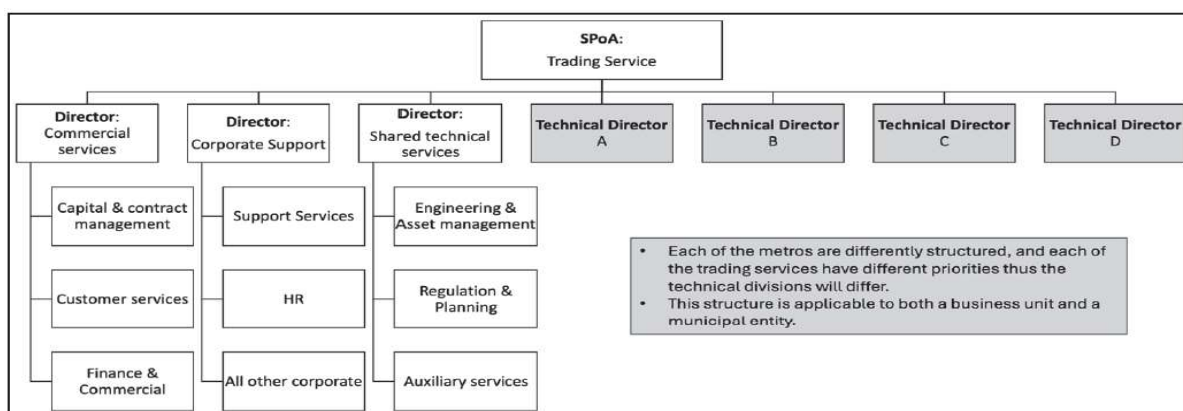


Figure 3: Example of Trading Service Organogram

2.2 City Stakeholders and Service providers

In instances where technical skill and functional responsibility exists outside of Water and Sanitation, the Directorate incorporates the use of Memorandum of Agreement (MOA's) to facilitate cost effective, efficient and quality services. Currently MOA's exist between Water and Sanitation and the following departments:

- Corporate Finance – Revenue Department
- Human Settlements (City-Owned public housing stock)
- Corporate Services – Customer Relations Department
- Community Services and Health – Environmental Health

The Directorate recognises that a review of current MOA's and the development of new mechanisms, including Service Level Agreements (SLAs) is necessary to ensure that performance is driven with the necessary monitoring and evaluation of the performance objectives in these agreements. The Directorate will draft and complete outstanding SLA's as determined above by FY 2026.

2.2.1 Customer call centre – Technical Dispatch Centre (TDC)

It is important to note that four objectives informs the decision to centralise the Call Centre function:

- i. The convenience factor to the customer to have one entry point to engage the City on any utility service matter
- ii. Efficiency of service delivery (not to duplicate resources for all the utility services)
- iii. A single point of contact can simplify processes and make it easier to manage staffing, training, and technology.
- iv. A centralized system can provide comprehensive data that can be used to analyse service trends and improve city planning and resource allocation.

The notification process enables the Water and Sanitation directorate to track and monitor the status of service requests and manage the process accordingly. It is also important to note that even though the City's call centre is centralised, the City contact offices and operational depot are decentralised, allowing for quicker responses to inquiries and issues, particularly those specific to certain areas of the city.

The Reticulation Branch within the WS Directorate is responsible for managing and operating the Water and Sanitation Technical Dispatch Centre (TDC). The TDC responds to all W&S related notifications received from the Corporate Call Centre. Although Water and Sanitation is an essential service, queries and complaints can be managed from a central call centre that is in line with the Water and Sanitation Customer Service Charter..

The above demonstrates that although the entry point is centralised, the continued service request management by the Directorate is part of the ring-fenced business of Water and Sanitation.

In order to sustain and improve the quality of asset care and services rendered to customers, the Water and Sanitation Directorate (Customer Services and Reticulation branches) developed and implemented a mobility solutions Mobility and Reactive Incident Management (RIMA) Systems through the use of current day technology, people skills and business processes that will realise improvements in maintenance quality of work, integrity of the database and ultimately a positive end to end customer journey.

In the past financial year, the roll out of phase 2 and 3 of the RIMA project (a Reactive Incident Management System) was completed at all 23 Reticulation depots within the 4 (four) Region model with the strategic goals of enhancing operational efficiencies, reducing costs and improving the organisation's responses to complaints of non-conforming services.

Some of the more tangible RIMA benefits include:

- Near real-time paperless feedback on notifications and orders;
- Highly structured, standardised and logical way of completing tasks and recording the outcomes into the related notification, orders and e-forms and linking photos to the work completed;
- Accurate recording of field results and feedback;
- Better reporting and query resolution (with evidence and system driven information storage);
- Reduced time frame to plan and respond to a service;
- Automated posting of confirmations thus reducing the admin load.

To improve operational efficiency and customer experience, the Directorate will continue expanding the mobility solution (RIMA project), which has enhanced maintenance quality and reduced response times.

In addition, the Directorate is in a process of assessing its operations to transition from a municipal engineering department to a modern, fit-for-purpose, world-class water services provider, with one of the objectives of creating a customer oriented organisation, with an objective to:

- To transition Water and Sanitation Directorate from an engineering utility to a customer centric service provider
- To have satisfied customers
- To create capability to understand customer experiences and perceptions better
- To improve customers' direct contact experience

The above will be achieved by focusing on the key areas:

- Map out all of the steps required to transition to a customer-oriented service and support implementation
- Review existing and develop required a customer relations related policy, service charter, standards and strategies
- Establish customer and stakeholder respective engagement capability, focus groups, design and implement programmes to understand customer experiences and perceptions better, hold regular focus group sessions with customers and stakeholders to diagnose customer challenges, provide recommendations and implementation plans
- Facilitate knowledge exchange, review call centre performance, feedback loops and negotiate and support the implementation of a suitable service level agreement with the City's call centre and stakeholders
- Engage with Corporate Services to improve the customer walk-in experience, and support the establishment of a dedicated water and sanitation customer service desks.
- Evaluate possible use of incentives/competition and/or outsourcing to improve customer experience
- Review existing and develop processes related to staff selection (e.g. front-line staff), training, and supervision and performance management.
- Review dedicated units to manage key customers, recommend improvements and support implementation.
- Support development and implementation of a narrative-based strategy to influence customer and stakeholder perceptions.
- Review, develop and support implementation of automation and artificial intelligence to improve creation of service orders, tracking, payments and reporting

2.2.2 Supply Chain Management – Contracts Management Unit (CMU)

Supply Chain Management (SCM) is a key partner in service delivery and resides in the Corporate Finance Directorate. The WS Directorate has a Capital and Contract Management Branch (CCMB) that facilitates resolution of any bottlenecks in delivery of procurement services and provides contract management support through the introduction of the gate review process amongst other key control measures. There are also plans to improve and reinforce the procurement function in the future in the Directorate through the CCMB. The CCMB also assists in monitoring and supporting compliance with the SCM process requirements.

The Organisational Effectiveness and Innovation Department, under the directive of the City Leadership, conducted a comprehensive review and optimization of the Supply Chain Management (SCM), Project, and Contract Management Value Chain across all City directorates. This initiative aimed to enhance operational processes, improve service delivery, and foster a positive organizational culture. The outcomes of this review is essential for optimal service delivery, fostering a culture of timely problem resolution, and driving innovation within the organization.

Although the City has SCM policies, standard operating procedures and encourages the delineation of roles and responsibilities in support of good governance the WS Directorate still faces several challenges. These challenges include but are not limited to:

- **Long Tender Process Timeframes:** The tender process often takes an excessive amount of time, delaying project implementation
- **Insufficient Human Resource Capacity:** The increase in the number of projects has outpaced the available human resources, leading to strain on the existing staff. There is

currently a moratorium on vacancies which directly impacts the directorates' ability to recruit the required staff.

- **Newness of the Branch:** The CCMB is a relatively new branch, and its processes and systems may still be developing.

As part of a future growth and development strategy, there are approved plans to include two new sections to the CCMB namely, Portfolio and Programme Management and Business Analysis & Data Analytics in the future. The Portfolio and Programme Management deals with strategic oversight of high-risk, complex projects and programs, ensuring the development, implementation, and monitoring of a capital portfolio. Additionally, the section will also incorporate the Integrated Master Planning (IMP) items into the SAP Programme, to facilitate effective planning and alignment of projects with relevant plans at the regional level. The Business Analysis & Data Analytics section will handle developing and implementing effective business processes aligned with Project and Contract Management procedures. This includes assessing City-wide processes and procedures to ensure standardised approaches to Project Management, Project Implementation, Demand Management, Contract Management, and Contract Administration. The role also requires implementing change management processes and engaging with stakeholders within the branch and across the Directorate. In the short period since its inception, the CCMB has made significant improvements in the procurement process by developing and implementing various control documents and process steps/ checks to ensure increases efficiency. Some of these improvements include improved demand plan management as well as the development of a tender expiry register allows planning for any potential contracts that may require deviation, expansion, etc.

As part of the SCM transversal dependency-through collaboration with the Finance Directorate- performance targets are agreed upon to ensure that procurement becomes more streamlined. Regular Collaboration meetings facilitated by the CFO also provides for the mutual resolution of operational and cross-cutting service delivery challenges. Overall, the Directorate is actively working to overcome any challenges in procurement and improve its efficiency and effectiveness- this is an ongoing process that will be continuously improved upon.

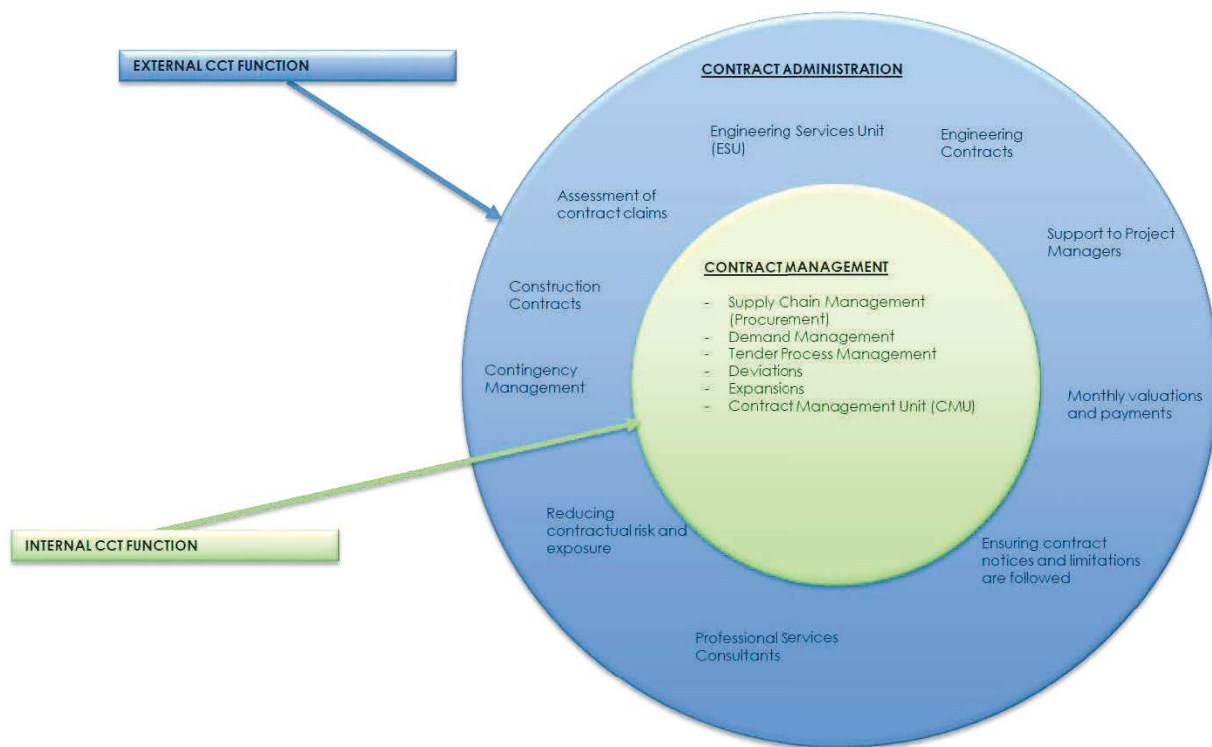


Figure 4: Relationship between SCM and Contracts Management Branch

The WS Directorate plans to address the above challenges via the following actions:

- Reduce tender process timeframes through additional streamlining procedures and better staff allocation- ongoing
- Improve human resource capacity within CMU by on boarding new staff members focused on contract management and monitoring- target date end of FY 2026.
- Strengthen collaboration between SCM and CMU to improve resolution of bottlenecks- ongoing

The Directorate is establishing a Project Management Office (PMO) which will incorporate the Capital and Contracts Management. The PMO will report directly to the Executive Director: W &S. This will enhance the SPoA to ensure that the ED is better capacitated to manage transversal SCM related matters and tracking of capital expenditure. The City will utilise this reform initiative to work with National Treasury on national reforms that may be required to address bottlenecks and challenges to address procurement inefficiencies. The review process as outlined in Section 2 of this document will undertake the necessary studies and analysis to identify the optimal approach for the Water and Sanitation utility as part of the reform programmes.

2.2.3 Water and Sanitation IT

The current IT environment for City staff is centralised and managed including SAP Enterprise Resource Planning Systems, and with supporting communication technology within the Water and Sanitation directorate. The City is embarking on the review of current ERP services and are considering a Core Application Review (CAR) process.

Operational technology, data feeds, and statutory reporting requirements (including Blue, Green, and No Drop) are stored on a dedicated server at the Water and Sanitation Head Office. Decisions support systems (DSS), SCADA, Barnowl, Wastewater Treatment Works (WwTW's), weigh bridges and other similar operational systems are also in place.

2.2.4 Water & Sanitation Fleet Management

The Water and Sanitation Directorate maintains its own fleet of vehicles, managed by the Fleet and Mechanical Workshops. This unit oversees the entire asset lifecycle of fleet management, including procurement, maintenance, and disposal. There is collaboration between the various fleets in the City with regards to tender, contract management and standardised processes on an adhoc basis. In-principle, agreements exist to manage these relationships. The current devolved fleet system managed by Water and Sanitation is working for the Directorate based on an average fleet availability of 91%.

2.2.5 Water and Sanitation Safety and Security Unit

The Water and Sanitation Law Enforcement unit was established to augment the capability of Safety and Security, to secure a dedicated service to the Directorate staff and to secure infrastructure. This was required after a number of robberies, vandalism of infrastructure and high-jacking of maintenance teams as well as attempted extortion of contractors. There is currently 30 members in the unit and plans to expand by an additional 60 members is underway. Further to this there is future planning to fund a corporate Escort Unit located within Safety and Security. This corporate unit will be under their control but Water and Sanitation will fund the staff and resources which includes capital items such as firearms and vehicles. Funding is estimated to be 40% of the service.

Currently the Directorate is reviewing the SLA between Safety and Security and Water and Sanitation Directorate due to the above changes.

2.2.6 Human Resources (HR) – Role of Water and Sanitation Human Resources Business Partner (HRBP) function

2.2.6.1 Role of Water and Sanitation HR in relation to Corporate HR

Each Directorate has its own mandate and identifies which skills, organisational development needs and processes are required within the auspices of the City. The mandate that Corporate HR has is supportive of City objectives, and does not supersede the mandate of Water and Sanitation. Accordingly, implementation of the City's HR Policy framework and processes, will be guided by the requirements of the Water and Sanitation business, necessitating that periodically the Directorate develops a Service Level Agreement (SLA) for a particular project or process. For example, the Directorate established a SLA between W&S and Corporate Strategic Staffing Office to address challenges to the recruiting process and accelerate the filling of vacancies during the project.

In the middle of the 2023/24 financial year the City was going through financial constraints, relating to the rising cost of chemicals, electricity and fuel (energy). There is also a negative impact on the planned budget, as a direct result of load shedding, security expenditure and major, unforeseen repairs and maintenance costs associated with collapses of critical infrastructure. These constraints required that the Directorate review its long term financial plan, to reprioritise the 10-year capital investment programme (in line with the City's funding capabilities) and to curb significant tariff increases by identifying operating cost drivers where efficiencies can be achieved. Salary and wages is one of the drivers that was identified as an area that can be reduced and managed to drive down operating costs. In so doing, the City could avoid a significant spike in tariff increases and reduce the impact on customers. As a result, the directorate has made a decision to cut positions and have a moratorium in place for vacancies. The moratorium came into effect in December 2023, focusing only on critical posts released through the Vacancy Management process. A Vacancy Review Forum was established to review and confirm which critical posts could proceed, and meets on a monthly basis.

In addition, the Directorate had previously funded the recruitment of additional Professional Officers into the corporate staffing office at the time when W & S recruitment was at its peak. Once vacancy filling processes return to normal, the directorate will draw these practitioners back in for the Directorate's exclusive use.

The ED: W&S has delegations for Recruitment and Selection in Water and Sanitation and is responsible for populating the Directorate workforce plan down to branch level. The Service Delivery and Budget Implementation Plans include HR related indicators namely, staff vacancy rate and percentage vacancies filled within the past six months that are monitored and evaluated on a regular basis.

The Directorate is reviewing the current HR working relationship and will implement relevant mechanisms that will include the strengthening of SLAs, going forward. In reinforcing the HR arm of the Directorate we have created and appointed Senior Professional Officers (SPOs) to provide dedicated services to each W&S department.

Moreover, the WS Directorate will conduct an analysis of HR processes and working arrangements in relation to its business and operational needs. This analysis will be concluded by the end of February 2025 and thereafter, any recommendations determined by the analysis will be implemented, with appropriate actions and timelines for implementation thereof.

2.2.6.2 Matching skills to new technologies

The City will be introducing new technologies over the short to long-term such as Advanced Metering Infrastructure, groundwater extraction and desalinisation. It is important that the necessary capacity and skills (re-skilling) are sourced and developed in line with an integrated HR approach to resource planning.

To this end, the Directorate has implemented the City process for the development and implementation of Strategic Workforce Plans (SWPs) which has been rolled out to all branches in Water and Sanitation. The SWP's address a range of challenges that include an ageing workforce, budgetary constraints, and market and other factors impacting on the Directorates' ability to be competitive in attracting, developing and retaining high quality talent. Strategic Workforce Planning is a process of shaping the workforce to ensure that it is capable of delivering on strategic objectives now and in the future. This is done by reviewing current requirements in relation to future resourcing needs, to ensure that the required capacity and skills sets are in place, and supported by the relevant HR policies and processes.

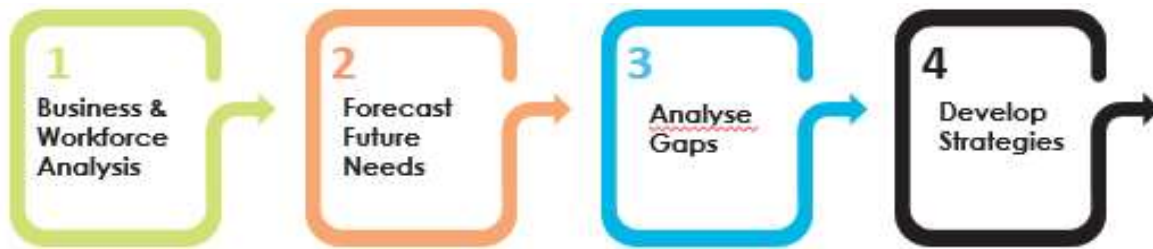


Figure 5: Strategic Workforce Planning Cycle

These plans are implemented, reviewed and updated at regular intervals to ensure that they maintain relevance and meet the needs of the business.

In addition, the Directorate is currently working on putting together a training academy that will bring in all training that is currently outsourced. This is also towards the re-skilling and development of staff in the directorate.

3 Governance Arrangements and Directorate Enhancements

3.1 Water Strategy: Alignment, Implementation and Review

The 2019 Water Strategy, 2017 Water Conservation, Water Demand Management Strategy as well as the current Water Services Development Plan (WSDP) serves as a Water and Sanitation road map as it encapsulates the Directorates intention for improved service delivery, water resource sustainability and capital investment. The Water Conservation and Water Demand Management Strategy is directly linked to the broader Water Strategy of the City of Cape Town. It represents a key component of the overall plan to ensure a sustainable and resilient water supply as highlighted below;

- **Shared Goals:** Both strategies share the common goal of ensuring a sustainable and resilient water supply for the city. They work together to address the challenges posed by climate change, population growth, and increasing water demand.
- **Complementary Approaches:** The Water Strategy provides a comprehensive framework for addressing water challenges, while the Water Conservation and Water Demand Management Strategy focuses specifically on reducing water consumption and optimising its use.
- **Synergies:** The two strategies work together synergistically. For example, the Water Strategy promotes water efficiency, while the Water Conservation and Water Demand Management Strategy implements specific measures to achieve this goal.
- **Mutual Support:** The Water Strategy provides the overarching context and direction for the Water Conservation and Water Demand Management Strategy, while the latter contributes to the achievement of the broader strategic goals.

Reviewing the Water Strategy is essential to ensure its continued relevance and effectiveness in addressing the City's water challenges. Regular reviews aim to assess the strategy's effectiveness in achieving its stated goals. This includes evaluating whether it has successfully diversified water sources, improved water conservation, enhanced infrastructure, and adapted to climate change. Through this process, the Directorate is able to identify any gaps or shortcomings in the strategy. This might involve areas where additional resources, initiatives, or policy changes are needed. By doing this, Cape Town can stay ahead of potential water crises and ensure a sustainable future for its residents.

The annual **Water Outlook** and **WSDP Audit Report** serve as essential self-assessment tools for the Directorate. These reports enable the monitoring of key deliverables and accountability, ensuring that the water strategy remains relevant and responsive to emerging challenges like climate change, population growth, and technological advancements. By conducting regular reviews, the Directorate demonstrates its commitment to transparency and accountability, fostering trust with residents and stakeholders.

3.2 Water and Sanitation Master Planning

A well-developed water and sanitation master plan provides a comprehensive roadmap for the directorate's water and sanitation infrastructure investment. The current master plan aims to optimise the existing water and sewer systems whilst aiming to identify the most cost effective future infrastructure development plan for the Directorate. The existing Reticulation water and sewer master plans is based on a 20-year horizon while the Bulk Water master plan has a 30-year horizon as it incorporates interventions under the Adaptable Programme which looks at maximising the utilisation of available resources after 2040. Both master plans are based on the Land Use 2040 model (LU 2040) which identifies densification additional future development areas covering the number of residential units and GLA for Business, Commercial and Industrial projected for development.

Since 2014, Water and Sanitation, Integrated Planning unit has embarked on a process of skills transfer and skills development to allow for master planning to be done internally. This is a specialised skill and this skills development process is still on going with the assistance of specialised engineers through a 3-year term tender. The next master planning exercise is anticipated to commence in 2028/29 once the updated, approved Municipal Spatial Development Framework (MSDF) is in place. The implementation of AMI will assist with the integrity of the master plans and it will provide a "live" indication of consumption across the City. This allows for an improved water balance to be done in conjunction with the existing infrastructure such as flow meters on pressure management devices as well as flow loggers on bulk meters.

3.3 Development of a Water and Sanitation Strategy

The Directorate acknowledges that the current Water Strategy (2019) is largely centred on the response to the drought and how to build resilience into our water system to mitigate the effects of climate change. Going forward, the directorate will develop a comprehensive Water and Sanitation strategy that will focus on both water and sanitation services in line with a continuous improvement approach in alignment with the Reform Strategy. This strategy will include the Directorate's extensive capital expenditure on bulk sanitation services namely upgrading of the wastewater treatment works and pump stations as well as the implementation of various innovative technologies along with skills transfer training programmes to transfer operational knowledge to City staff to allow for upskilling of staff. It will also consist of clear targets for operational performance, customer satisfaction, and financial sustainability. The WS Directorate has a target date of end of FY 2027 to develop this framework.

3.4 Strengthening of accountability through the review of existing Memorandum of Agreements

The Directorate plans to re-develop/ review the current Memorandum of Agreements (MOA's) with all Corporate Directorates and other service providers to intentionally strengthen single point of accountability by end of the FY 2027. The first year FY 2026 will be the review and the implementation will take place in FY 2027. This will include but is not limited to close scrutiny of corporate services as well as monitoring their performance. This includes engagement with the City Manager to ensure existing MOA's and proposed service level agreements (SLA's) are effectively managed through the appropriate delegations and that mechanisms for performance monitoring and evaluation of SLA's are put in place, including relevant sub-delegations to ensure effective service delivery controls.

3.5 Asset Management

The Water and Sanitation directorate had established the Asset Management Steering Committee (AMSCO) with a focus on a broader W & S directorate asset portfolio. Long-term planning needs to be conducted in a coordinated manner to establish successful asset management objectives and plans. The outcome of this review was the decision to begin the development of clear, long-term Terms of Reference with an inclusive committee that integrates transversally and aligns with the agreed upon long-term imperatives and objectives. There will be ongoing quarterly AMSCO meetings.

The City of Cape Town (CCT) under the guidance of National Treasury has evaluated and developed key focus on Asset Management by adopting and aligning to the ISO 55001: Asset Management Standard. This resulted in the CCT Infrastructure and Asset Management Policy approval on 27 March 2024 and the provision of guidance for the development of a Strategic Asset Management Plan to all Directorates.

CCT has also further set forth development and enhancing of processes to incorporate the requirements defined within MFMA Circular 80, which strategically will include a focus on overall asset lifecycle costing.

In-turn the Water and Sanitation Department has set forth initiatives in the development of Asset Management objectives and Strategic Asset Management Plans that provides strategic direction and key focus on further development and enhancement of asset care within the department.



Figure 6: Asset Lifecycle

These initiatives will also include aspects relevant to asset procurement cost and overall asset life cycle costing. The Steering committee will be responsible for developing the Asset Management objectives and Asset Management Plan's monitoring and reviewing, approval and implementation. The Asset Management SOP's will be reviewed and updated by end of the 2025 financial year.

3.6 Advanced Metering Infrastructure (AMI) Progress

AMI will allow real-time monitoring of water consumption, leading to more accurate billing, early detection of leaks, and improved revenue collection efficiency. The goal is to implement a digital water solution for the City of Cape Town that enhances customer trust in accurate water billing while supporting long-term water resilience. It is envisaged that the full and effective implementation of AMI could yield significant improvements in revenue as a result in improvements in metering accuracy. The AMI will generate data that will be very useful in planning, operating and maintaining the service more effectively

The Programme has been structured into two phases (See Annexure A):

- Phase I - This phase will include the installation of the first 130,000 smart meters and related infrastructure from approximately the 1st Quarter of Financial Year 2026 (Q1 FY26) to Q4 FY28, primarily targeting industrial, commercial, and high-usage residential customers.
- Phase II - This phase will cover the installation of the remaining circa 500,000 smart meters from approximately Q2 FY28 to Q2 FY38.

4 Water and Sanitation Financial Transparency

4.1 Annual Financial Statements

The City has implemented the mSCOA instructions and prepared a separate Water and Sanitation Annual Financial statement for the W&S Directorate showing full income and expenses (See Annexure B). The consolidated Annual Financial Statements for the 2023/24 financial year is currently in the Auditor General (AG) audit process.

4.2 Moving towards greater financial transparency

The Water and Sanitation Directorate is committed to moving towards greater financial transparency. To achieve this, we will produce and publish an independent audited financial statement by FY2025. This transparency is key to ensuring trust with residents and stakeholders, as well as achieving financial sustainability. Annexure 1 attached, provides an overview of the financial performance of the directorate for the financial year (FY 24). Ongoing monthly collaboration meetings with the Chief Financial Officer (CFO), chaired by the W&S ED – regarding the Reform Plan /Process Furthermore the need to develop a document which defines the financial relationship between W&S Directorate and City (addressing financial transparency). This model is in place and the latest review will be concluded by end FY 2026.

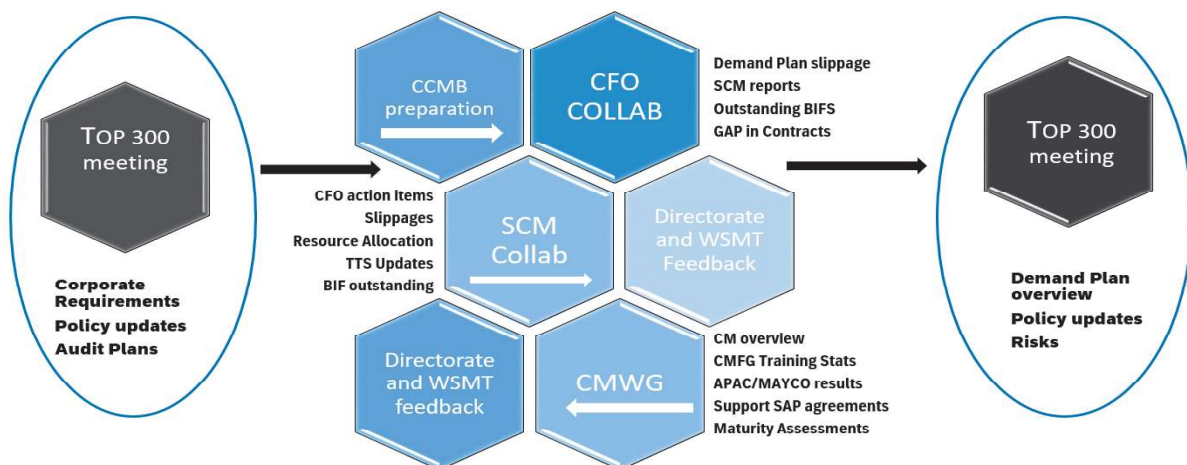


Figure 7: Collaboration Forums- SCM-CFO-CMWG

Numerous measures have been put in place to improve the effectiveness and efficiency of corporate processes - this is an ongoing exercise. In this ongoing process to improve, single point of accountability, financial transparency, solvency and sustainability the WS Directorate will place scrutiny on corporate charges, fees, the equitable share and other similar financial transactions. The WS Directorate needs to assess services from Corporate Directorates to determine whether they provide Value-for-Money.

To establish clear service level agreements with clear deliverables and frequently monitored performance the WS Directorate will review the current SLA process. The Directorate will also pursue the establishment of enhanced accountability through sub-delegation by the City Manager of powers to the ED: W & S to monitor and evaluate performance, and review the service where necessary. Moreover, to terminate services in instances where there is non-performance, and explore alternative mechanisms for a better service where necessary.

Revenue collected for Water and Sanitation by the City's Revenue Department is ring-fenced for exclusive use by the utility's tariff funded sections. Once collected, revenue is allocated to a Water and Sanitation Profit Centre. There are also allocation rules that govern debt collection from customers.

The Water and Sanitation Service pays an agreed (cost driver) recharge rate for corporate and shared services that is funded from the tariff. Numerous measures have been put in place to improve the effectiveness and efficiency of corporate services - this is an ongoing exercise in the City.

5 SPoMA Appointment and Governance Protections

Water and Sanitation has been established as a separate directorate reporting directly to the Accounting Officer of the City. This role is performed by the appointed Executive Director who holds accountability for the provision of water and sanitation services in the Cape Metro area. The role resides within the governance framework of the City in which various enabling functions range from centralised to decentralized, as unpacked in Section 2.1. The current incumbent was appointed in line with Municipal Systems Act (MSA) Section 57 and this is delegated to the City Manager as guided by the Local Government Municipal Staff Regulations (MSR), published on 20 September 2021. The incumbent is contractually managed against these requirements with regular review throughout the year. Performance agreements are reviewed and will incorporate the Reform Strategy initiatives.

The Water and Sanitation Reform IRM seeks to put in place mechanisms to enable an optimal model that achieves SPoMA for the trading service within the context of legislation, City governance imperatives and meeting economy of scale and efficiency. These will ensure that SPoMA is established and maintained for the purpose of managing all aspects of the Utility by way of an integrated institutional structure.

The City of Cape Town has reached a level of political stability in recent years that cannot be taken for granted. The impact of potential political changes could affect Council's commitment to the reform journey. As the commitment of the political leadership to the WS Reform Strategy is a key driving factor in achieving the objectives, it is important that governance protections are put in place to safeguard the outlined Institutional Road Map.

Accordingly, commitment to the Council adopted WS Reform strategy will be embedded and monitored through feedback reports to The Water and Sanitation Portfolio Committee who will perform an oversight role in assessing implementation progress.

6 Roadmap for Institutional Reform/Improvement

The table below is an indication of areas the Directorate has identified that either needs to be put in place and or requires review and improvement of existing processes in place.

Table 2: Next Steps

What	Who	When
Regular feedback on the implementation of the Water Strategy through the Outlook report	Bulk Services Department	Annually
Develop a comprehensive Water and Sanitation Strategy (a beyond 2030 Water and Sanitation strategy)	ED, All Departments	End FY 2027, then every 5 years
Review and Update of the Asset Management SOP's	ED, Technical Services Department	End FY 2025
Ongoing Quarterly Asset Management Steer Com	Technical Services Department	Quarterly
Water Conservation Water Demand Management Strategy Update	Technical Services Department	End FY 2026
AMI progress report	Customer Services Department	Annual Update
W & S Directorate separate (from the City) and independent Audited Financial Statement produced and published	ED, Commercial and Financial Services Department	End FY 2025, then annually
Development of W&S SLA agreements with all Corporate Directorates and other service providers to intentionally strengthening single point of accountability. This will include close scrutiny of corporate services	ED, Technical Services	End FY 2026, draft and complete outstanding SLA's
Implementation mechanism for Performance monitoring and evaluation of SLA's put in place	ED, Technical Services	End FY 2027
Establishment of enhanced accountability by ED through the subdelegation of powers by the CM to effectively manage SLA's	ED	End FY 2026
Ongoing monthly Collaboration meetings with the CFO, chaired by the W&S ED – regarding the Reform Plan /Process	ED	Quarterly
Develop a document to define the financial relationship between WS Directorate and City (addressing financial transparency)	ED, Commercial Services	End FY 2026
Equitable Share Formula allocation agreement	ED, Directors	Annually
Review Development Contributions	ED, Directors	Annually
Review medium and long term financial sustainability model	Directors	Annually

What	Who	When
Investigate Directorate capacity to produce AFS	Commercial Services	End 2025
Review of all shared services and centralised functions including HR Processes and governance arrangements (Establish working group for trading services reform with corporate services departments)	ED, Directors, Support Services, HRBP	End FY 2026
Vacancy Management Review Forum	HRBP/Financial Services	Monthly
Establish a Project Management Office (PMO) which will incorporate the Capital and Contracts Management	ED, HRBP	End Jan 2025
WS to appoint a service provider to develop and review a change management strategy to support the reform process	ED, Directors	End FY 2026
To develop a technical skills development programme for technical staff	HRBP	End June 2025

This section defines what the intention of the Directorate is to the areas specified above.

7 Conclusion

The Water and Sanitation Directorate has made significant strides in implementing a Single Point of Accountability (SPoA) governance model. However, we recognize the need for continuous improvement to address the challenges across procurement, human resources, and service delivery. This shift aligns with the City's broader reform strategy and is essential for ensuring efficient and effective water and sanitation services.

Key areas of focus include:

- **Organisational restructuring:** The creation of four directorates within Water and Sanitation has facilitated a clear delineation of responsibilities and improved decision-making.
- **Centralised services:** Procurement, call centre services, and Human Resources are centralised to enhance efficiency and economies of scale.
- **Financial transparency:** The Directorate is committed to producing independent audited financial statements to increase transparency and accountability.
- **Strategic planning:** The development of a Water and Sanitation Strategy, Master Planning, and Asset Management plans provides a roadmap for future infrastructure investments and service improvements.
- **Technology advancements:** The implementation of Advanced Metering Infrastructure (AMI) and other technological innovations will improve operational efficiency and customer service.
- **Technical Training** – the City is currently focusing on legislative training rather than technical training. The focus going forward for investment will be in the training and re-skilling of our technical staff such as artisans, process controllers/operators, technicians, engineers, and scientists.

Considering the above the Directorate recognises the need for continued improvement. Areas for further development will be assessed by a review of all shared services and centralised functions to address:

- **Strengthening of MOA's:** The review and development of Memorandum of Agreements with corporate departments and service providers in addition to other service management mechanisms identified in the review of all shared and centralised services, will enhance collaboration and accountability.
- **Improving Customer Services** by utilising the WS Customer Satisfaction Survey and operational data to monitor and evaluate performance
- **Human Resources capacity:** The Directorate will focus on developing and retaining a skilled workforce to meet the challenges of new technologies and evolving service demands.
- **Financial sustainability:** The Directorate will explore strategies to achieve long-term financial sustainability and ensure the provision of high-quality water and sanitation services.

By addressing these key areas for improvement and setting clear targets, we aim to position the Water and Sanitation Directorate as a model of efficiency, transparency, and continuous improvement.

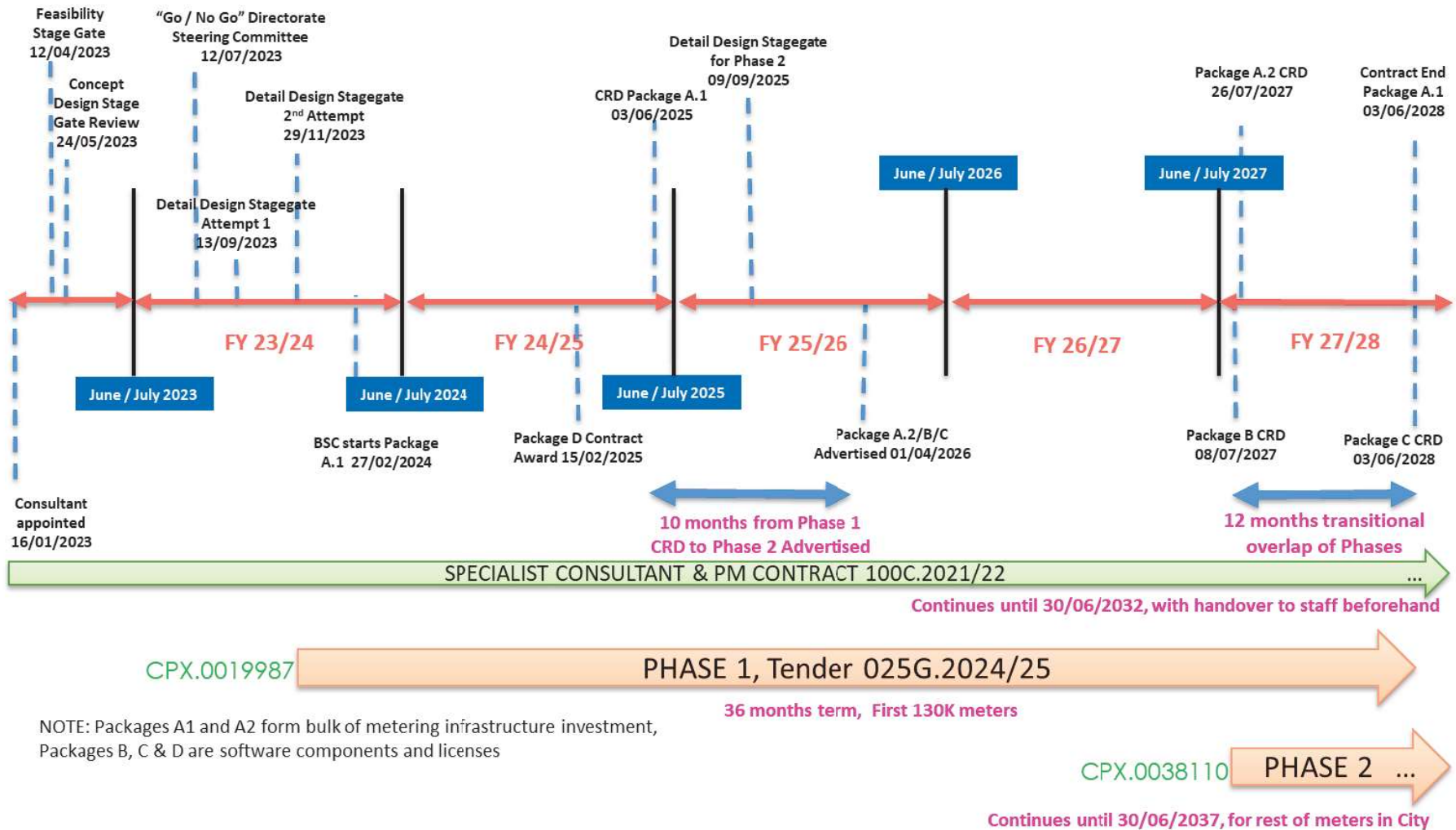
8 Annexures

Annexure A: AMI Programme Milestones (2022/23 to 2036/37) - with a focus on Phase 1

Annexure B: Water and Sanitation AFS 2024 (Unaudited)

Annexure A

AMI PROGRAMME MILESTONES (2022/23 to 2036/37) - with a focus on Phase 1



STATEMENT OF FINANCIAL POSITION – WATER AND SANITATION

AS AT 30 JUNE 2024

	Note	2024 R'000	2023 R'000
ASSETS			
Non-current assets		18 459 731	15 777 506
Property, plant and equipment	1	18 459 731	15 777 506
Current assets		1 949 045	2 160 364
Inventory		46 300	41 692
Receivables	2	1 721 983	1 833 429
VAT		2 875	0
Investments		177 887	285 243
TOTAL ASSETS		20 408 776	17 937 870
LIABILITIES			
Non-current liabilities		10 225 162	8 524 701
Borrowings	3	9 501 941	7 770 713
Provisions	4	723 221	753 988
Current liabilities		2 967 083	2 719 692
Deposits	5	26 327	25 502
Provisions	4	259 238	243 533
Payables	7	1 744 021	1 105 959
VAT	8	-	94 888
Current portion of borrowings	3	525 439	437 833
Inter-loan account		412 058	811 977
Total liabilities		13 192 245	11 244 393
NET ASSETS			
Total net assets		7 216 531	6 693 477
Reserves		177 887	285 243
Accumulated surplus	10	7 038 644	6 408 234
TOTAL NET ASSETS AND LIABILITIES		20 408 776	17 937 870

STATEMENT OF FINANCIAL PERFORMANCE – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

	Note	2024 R'000	2023 R'000
REVENUE			
Exchange revenue		7 584 905	6 304 277
Service charges		7 306 326	6 050 569
Rental of letting stock		271	211
Interest on outstanding debtors		223 750	200 841
Other income		49 696	48 331
Gains on disposal of property, plant and equipment		4 862	4 325
Non-exchange revenue		1 303 166	1 188 417
Service charges		31 159	36 773
Fines		3 024	153
Government grants: Operating		1 265 961	1 151 491
Public contributions		3 022	-
Secondary revenue		2 440 931	2 044 816
Internal utilities		2 430 263	2 036 871
Insurance recoveries		10 668	7 945
Total revenue		11 329 002	9 537 510
EXPENDITURE			
		7 326 019	6 629 570
Employee-related costs	8	2 470 579	2 191 164
Impairment costs		727 804	491 990
Collection costs		7 727	3 540
Depreciation and amortisation expense		711 275	635 501
Bulk purchases		136 678	147 221
Contracted services		935 490	794 242
Grants and subsidies paid		28 216	27 774
General expenses	9	2 306 602	2 337 611
Loss on disposal of property, plant and equipment		1 648	527
Secondary expenditure		3 081 047	2 306 697
Internal utilities		2 109 977	1 685 222
Interest on borrowings		932 570	582 916
Contributions to R&G		-	4 100
Insurance premiums		38 500	34 459
Total expenditure		10 407 066	8 936 267
Surplus		921 936	601 243
Less: Activity based costing		23 701	24 190
Less: Support services		770 438	704 993
SURPLUS FROM OPERATIONS		127 797	(127 940)
add: Capital grants		395 257	358 226
SURPLUS FOR THE YEAR		523 054	230 286

STATEMENT OF NET ASSETS – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

	CAPITAL REPLACEMENT RESERVE R'000	ACCUMULATED SURPLUS R'000	TOTAL R'000
2023			
Balance at 30 June 2022	454 554	6 008 637	6 463 191
Net surplus for the year		230 286	230 286
Transfer to reserves	79 640	(79 640)	
Property, plant and equipment purchased	(248 951)	248 951	
Balance as at 30 June 2023	285 243	6 408 234	6 693 477
2024			
Balance at 30 June 2023	285 243	6 408 234	6 693 477
Net surplus for the year		523 054	523 054
Transfer to reserves	50 372	(50 372)	
Property, plant and equipment purchased	(157 728)	157 728	
Restated balance as at 30 June 2024	177 887	7 038 644	7 216 531

CASH FLOW STATEMENT – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

	Note	2024 R'000	2023 R'000
CASH FLOW FROM OPERATING ACTIVITIES			
Cash receipts from ratepayers, government and other		11 469 488	9 420 042
Cash paid to suppliers and employees		(8 896 653)	(7 901 772)
Cash generated from operations	13	2 572 835	1 518 270
Finance income		223 750	200 841
Finance costs		(932 570)	(582 916)
NET CASH FROM OPERATING ACTIVITIES		1 864 015	1 136 195
CASH FLOW FROM INVESTING ACTIVITIES			
Additions to property, plant and equipment		(3 345 544)	(2 066 187)
Proceeds on disposal of assets		(44 742)	(175 985)
Decrease in investments		107 356	169 311
NET CASH FROM INVESTING ACTIVITIES		(3 282 930)	(2 072 861)
CASH FLOW FROM FINANCING ACTIVITIES			
New loans raised and interest capitalised		2 293 318	1 114 025
Repayment of borrowings		(474 484)	(414 296)
NET CASH FROM FINANCING ACTIVITIES		1 818 834	699 729
NET INCREASE IN INTER-LOAN ACCOUNT		399 919	(236 937)
Inter-loan account at the beginning of the year		(811 977)	(575 040)
Inter-loan account at the end of the year		(412 058)	(811 977)

-

-

NOTES TO THE FINANCIAL STATEMENTS – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

1 PROPERTY, PLANT AND EQUIPMENT

As at 30 June 2024

Infrastructure assets

Other assets

Assets under construction

TOTAL

Opening Balance R'000	Transfers/ Adjustments R'000	Additions R'000	Disposals R'000	Depreciation R'000	Carrying value R'000
11 942 714	1 490 084	1 013 691	-	(529 788)	13 916 701
1 610 696	56 061	329 700	(5 837)	(181 487)	1 809 133
2 224 096	(1 492 352)	2 002 153	-	-	2 733 897
15 777 506	53 793	3 345 544	(5 837)	(711 275)	18 459 731

2 RECEIVABLES

As at 30 June 2024

Service debtors

Other debtors

TOTAL

Gross balance R'000	Provision for impairment R'000	Net balance R'000
4 424 012	(2 802 932)	1 621 080
100 903	-	100 903
4 524 915	(2 802 932)	1 721 983

Reconciliation of impairment provision

Balance at beginning of the year

Contributions to provisions

Transfers to/from provisions

Bad debts written off

Balance as at 30 June 2024

2 665 327

673 612

-

(536 007)

2 802 932

As at 30 June 2023

Service debtors

Other debtors

TOTAL

Gross balance R'000	Provision for impairment R'000	Net balance R'000
4 139 752	(2 665 327)	1 474 425
359 004	-	359 004
4 498 756	(2 665 327)	1 833 429

Reconciliation of impairment provision

Balance at beginning of the year

Contributions to provisions

Transfers to/from provisions

Bad debts written off

Balance as at 30 June 2023

2 297 865

535 038

-

(167 576)

2 665 327

NOTES TO THE FINANCIAL STATEMENTS – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

3 BORROWINGS

	2024 R'000	2023 R'000
Loans	10 027 380	8 208 546
Current portion transferred to current liabilities	(525 439)	(437 833)
	9 501 941	7 770 713
Reconciliation of borrowings		
Balance at beginning of the year	8 208 546	7 508 817
New loans raised (EFF funded asset acquisitions)	2 293 318	1 114 025
Loans repaid (EFF funded asset depreciation)	(469 024)	(410 634)
Loans repaid (EFF funded asset retirements)	(5 460)	(3 662)
Balance as at 30 June	10 027 380	8 208 546

4 PROVISIONS

As at 30 June 2024

	Non-current R'000	Current R'000	Total R'000
Long-service leave benefits	94 129	16 272	110 401
Post-retirement medical aid	629 092	46 820	675 912
Other provisions	-	196 146	196 146
TOTAL	723 221	259 238	982 459

As at 30 June 2023

	Non-current R'000	Current R'000	Total R'000
Long-service leave benefits	91 146	17 498	108 644
Post-retirement medical aid	662 842	40 013	702 855
Other provisions	-	186 022	186 022
TOTAL	753 988	243 533	997 521

5 CONSUMER DEPOSITS

	2024 R'000	2023 R'000
Service	10 027	9 612
Other	16 300	15 890
TOTAL	26 327	25 502

NOTES TO THE FINANCIAL STATEMENTS – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

6 PAYABLES

Trade creditors
Payments received in advance
Other creditors
TOTAL

2024 R'000	2023 R'000
1 735 111	1 097 875
-	-
8 910	8 084
1 744 021	1 105 959

7 VAT

VAT payable
VAT receivable
TOTAL NET VAT
VAT is payable on the payment basis

(224 606)	(239 143)
227 481	144 255
2 875	(94 888)

8 EMPLOYEE-RELATED COSTS

Salaries and wages
Social contributions - UIF, pensions and
Travel, car, accommodation, subsistence and
Housing benefits and allowances
Overtime payments
Contribution: post-retirement and long

1 658 490	1 498 390
438 005	391 919
93 153	84 117
9 353	8 320
251 067	276 894
22 718	(64 067)
2 472 786	2 195 573
(2 207)	(4 409)
2 470 579	2 191 164

Recharged to Capital
TOTAL

9 GENERAL EXPENSES

Consultants
Electricity - Eskom payments
Fuel
Minor tools and equipment
Rental
Security services
Telecommunications
Other expenditure

107 907	113 542
126 284	102 724
119 152	148 160
115 817	122 463
6 763	6 441
296 837	252 250
5 359	4 298
1 528 625	1 587 932
2 306 744	2 337 810
(142)	(199)
2 306 602	2 337 611

Less: Expenditure recharged to capital
TOTAL

NOTES TO THE FINANCIAL STATEMENTS – WATER AND SANITATION

FOR THE YEAR ENDED 30 JUNE 2024

10 CASH GENERATED BY OPERATIONS

Surplus for the year
Adjustment for:
Depreciation
Contribution to provisions
Contribution to impairment provision
Gain and loss on disposal of property, plant and equipment
Interest on outstanding debtors
Finance costs

Operating surplus before working capital changes:

(Increase)/Decrease in inventories
(Increase)/Decrease in receivables
Increase/(Decrease) in deposits
Increase/(Decrease) in payables
Increase/(Decrease) in net VAT

Cash generated by operations

2024 R'000	2023 R'000
523 054	230 286
1 539 424	1 274 282
711 275	635 501
(15 062)	(106 958)
137 605	367 462
(3 214)	(3 798)
(223 750)	(200 841)
932 570	582 916
2 062 478	1 504 568
(4 608)	6 071
(26 159)	(270 528)
825	(11 554)
638 062	292 591
(97 763)	(2 878)
2 572 835	1 518 270

Annexure A2

CITY OF CAPE TOWN

WATER AND SANITATION

REFORM STRATEGY

2024

ANNEXURE A2

Water & Sanitation Business & Investment

Plans (W&S B&IPs)

Version 2.0: 26 September 2024

Please note that some confidential content has been redacted to make this document suitable for publication.



CITY OF CAPE TOWN
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APPROVAL


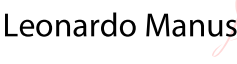

Name	Designation	Signature	Date
Zolile Basholo	Director: Technical Services (WS)	 Digitally signed by Zolile Basholo Date: 2024.09.26 16:16:48 +02'00'	
Leonardo Manus	Executive Director: Water and Sanitation	 Digitally signed by Leonardo Manus Date: 2024.09.26 16:33:26 +02'00'	
Kevin Jacoby	Acting City Manager	 Digitally signed by Kevin Jacoby Date: 2024.09.27 11:39:06 +02'00'	

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1 Introduction

The City of Cape Town's Water and Sanitation Reform Strategy outlines a comprehensive approach to addressing the challenges and opportunities within the city's water and sanitation services. This strategy is pivotal in enhancing the operational efficiency, financial sustainability, and infrastructure resilience of the sector, while ensuring equitable service delivery to all residents.

Annexure A2 of the Reform Strategy presents detailed business and investment plans that are integral to the successful implementation of the broader reform objectives. It provides an in-depth analysis of commercial and financial strategies, infrastructure and capital projects, and the funding mechanisms that underpin the reform initiatives. The document also highlights the critical need for improved service delivery models, innovative financial management practices, and a robust implementation framework to meet the growing demands of the city's population and evolving environmental challenges.

By aligning the Water and Sanitation Directorate's plans with the overarching reform strategy, the City aims to foster a sustainable, efficient, and financially transparent service model. This document serves as a key reference point for stakeholders, outlining both the strategic direction and the specific actions required to secure the long-term viability and effectiveness of water and sanitation services in Cape Town.

2 Commercial and Financial Plans

2.1 Commercial Plans and Operational Effectiveness

The Water and Sanitation Development Plan includes a comprehensive commercial plan aimed at improving financial performance, operational efficiency, and service delivery. In addition to the already existing Finance and Commercial Branch, two (2) additional branches were established, the Customer Services (CSB) as well as the Capital and Contract Management (CCMB) Branches. Below is the macro structure of the Water and Sanitation Directorate within which the Commercial Services Department operates. These branches are essential in consolidating customer services, optimizing operations, and ensuring sound management of capital projects.

The CCMB which is part of Commercial Services Department will now move to report to the ED from 1 October 2024, transitioning into the Project Management Office that will be formalised in January 2025.

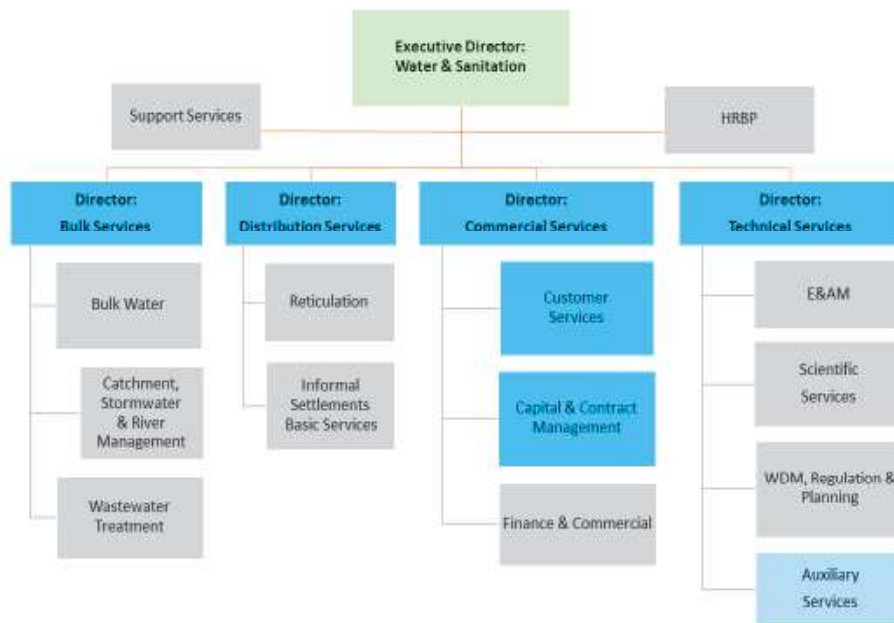


Figure 1: City of Cape Town Water and Sanitation Directorate Organogram

The structure reflects the size and complexity of the full value chain in delivering a water service and ranges from managing water sources, to the production, conveyance, storage and distribution of potable water. Potable water is then used by various uses and then results in a flow to the sewer network via gravity mains pump stations and gets ultimately treated various Wastewater Treatment Works before being released to the environment. This structure is designed to operate and manage the dependency and operation of the full infrastructure system. Although this structure has been allowed focused improvements to be made with clear accountability, challenges still exist.

Challenges relate to the need for standardisation. Agreement on the array of treatment technologies being used in the city. The improvement in terms asset management particularly in the areas of proactive maintenance with adequate human resource, tools, machinery and spares (warehousing of spares – SCM matter). The problem of poor inland water quality reflects the challenges of rapid urbanisation and the operational strain the water and sanitation infrastructure is under. The rate of informality, back-yarding and densification requires a multi-faceted response that will require a medium to long term overcome.

Following the drought declaration in March 2017, the City of Cape Town introduced a series of emergency drought relief initiatives to both curb water usage as well as to augment the City's water supply. Accordingly, financial sustainability was identified as the primary risk facing the City, as well as an increase in customer complaints resulting from:

- Accelerated meter replacement programme
- Impact of punitive tariffs on Billing and Estimations

This prompted the draft of a Service Delivery and Business Improvement Plan (SDBIP). Once drafted it became clear that the City was already being stretched to cope with daily operations and did not have the internal capacity to execute the plan. A decision was made to bring on board specialist advisors in order to deliver on the plan by end of June 2019. The customer services project was thus initiated with its key objective being to reduce risks to the City's water business and to provide a sound basis for the sustained improvement in service delivery. At the end of this initiative, a Customer

Services Branch was established, with a purpose to consolidate and direct all water customer services under a new Customer Services Manager responsible for:

- Optimising water meter management operations
- Accurate billing based on actual meter readings
- Effective debt management and revenue collection
- Responsive customer queries management
- Business analysis functions aimed at co-ordinating SAP/ERP requirements, quality assurance and continuous improvement.

Most of these functions are performed by the Customer Services Branch. Below is an indication of the functions and responsibilities within the Customer Services branch;

Table 1: Customer Services Branch and respective sections

Meter Management	Billing Management	Debt Management	Customer Relations Management (CRM)
Meter Management The provision of a water metering function that contributes to water revenue protection and growth ; <ul style="list-style-type: none"> - Meter commissioning, maintenance & repair - Meter testing - Investigation into new metering technology & testing systems - AML & meter related technology changes - Contractor and Supplier management - Accurate measurement is critical to good planning. 	Billing Management The provision of an accurate customer billing service that contributes to water revenue protection and growth ; <ul style="list-style-type: none"> - Meter reading - Customer billing processes - Accurate billing based on actual readings - Implausible meter readings & estimations management - Control & reporting on billing data - SAP Master Data Management 	Debt Management The provision of a comprehensive debt management function in association with the CFO's office (Corporate – Revenue) that contributes to water revenue protection and growth by maximizing debt collection practices and strategies to minimize customer debt. <ul style="list-style-type: none"> - Debt management strategies, policies & practices - Effective Water disconnections/reconnections in line with policies - Proactive engagement with corporate Revenue to ensure seamless debt management - Control & reporting on debt management Data 	Customer Relations Management The provision of a Water Services customer relations service , in conjunction with other City customer services functions that contributes to water revenue protection and growth . <ul style="list-style-type: none"> - Customer Services Charter & City policy directive alignment - Resolution of all water related customer queries including C3's, billing queries and adjustments - Key account group management for complex and large customer accounts - Daily interaction with Corporate Customer Contact Centre, Revenue Walk-in Centres - Control & reporting on CRM data

In addition to these key focus areas, there are two (2) enabling transversal functions, Business Analysis and Finance and Administration which enables effective and sustainable service delivery across full Water and Sanitation service value chain.

2.2 Sustainability of the trading service

In addition to the above, Water and Sanitation recognised that Financial Management is essential to the continuous delivery and sustainability of the water and sanitation service, through objectives that will enable the Directorate to achieve solvency and sustainability of trading services, sufficient predictable revenue through accurate and reliable billings, revenue collections and sufficient cash.

Enhanced billing systems and processes are central to the performance of Water and Sanitation services, with advanced technologies like Advanced Metering Infrastructure (AMI) that is being planned for deployment. AMI will allow real-time monitoring of water consumption, leading to more accurate billing reducing/eliminating estimations and human error that is currently between 10-11%, early detection of leaks at the meter and end-user, and improved revenue collection efficiency. It is envisaged that the full and effective implementation of AMI could yield significant improvements in revenue as a result of improvements in metering accuracy.

The City had a meter replacement programme to address meter related challenges such as ageing meters, inaccurate master data, malfunctioning meters, inaccessibility of meters, inability to locate meters due to illegal structures built over, straight/unmetered connections, and vandalised meters and meter chambers.

Where illegal connections are found, our Water Inspectors issue a notice for disconnection and thereafter disconnected. For non-payment the City will issue a notice to the end-user and thereafter restrict flow for residential users and disconnect commercial and industrial users.

To further address commercial and social challenges to billing and collection, in 2023 a Communications and Partnerships branch was established to enhance customer engagement through improved communication platforms, stakeholder engagement to understand and respond to stakeholder perceptions, and implement outreach programs. Initiatives such as digital communication channels and customer education campaigns aim to improve trust and transparency between the Water and Sanitation and its customers. This has led to raised awareness with customers in terms of accessibility to City platforms and Call Centre services.

2.3 Financial Management

A robust financial management framework to ensure that revenue generated from customer billing and collections supports the ongoing operations and future capital needs of the Directorate. Financial models have been developed to consider different scenarios based on approved capital budget, operating cost needs and tariff implications in the long term financial plan. The financial trends data indicate a steady increase in the City's investment in water and sanitation services, reflecting growing demands from a rising population, climate change adaptation, aging infrastructure, and need to adhere environmental regulations. The key financial trends can be summarised as follows.

2.3.1 Revenue growth

Revenue from water sales has grown steadily post drought, driven by increasing seasonal demands, tariffs and efforts to improve collection efficiency. However, the City's revenue from water sales remains sensitive to consumption patterns, especially with the changes in pattern of water consumption in recent years as a result of the necessary extreme measures taken to avoid "Day Zero". It has further been observed that the reduced consumption levels in the higher levels of the step tariff has limited the ability to cross-subsidise.

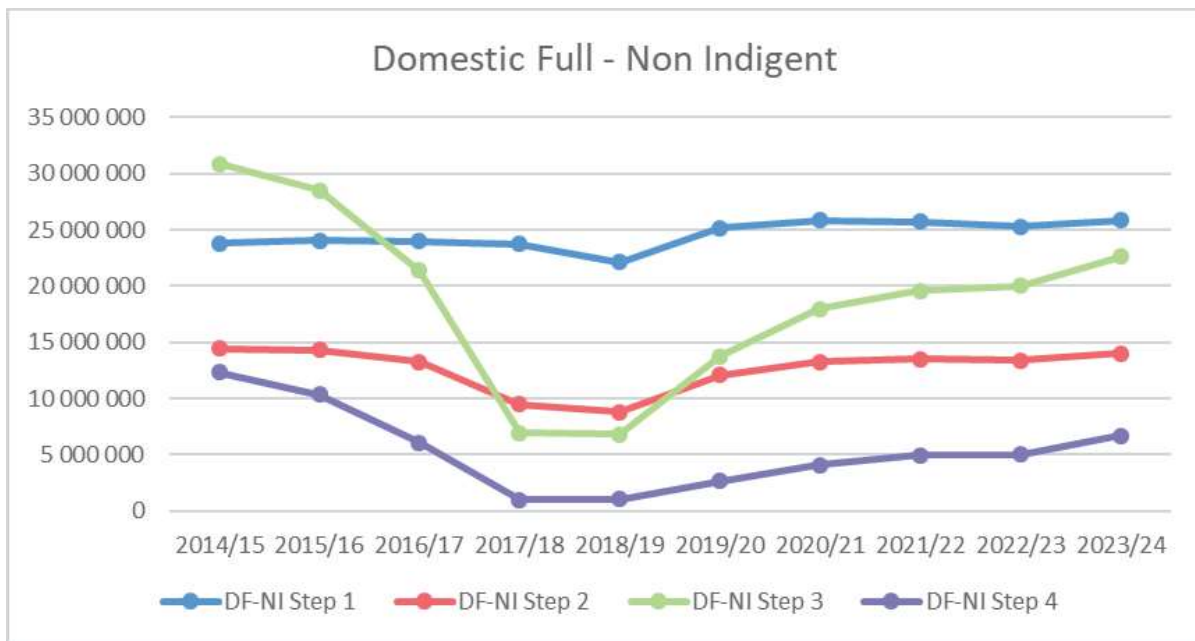


Figure 2: Volumetric trend of Domestic stepped tariffs

2.3.2 Operational Expenditure

Over the past number of financial years, the City has seen a significant increase in operation costs. The operational expenditure of the Directorate is increasing due to:

- The rising cost of energy (relating to the associated tariffs);
- Fuel costs (driven by load shedding and cost of fuel);
- Chemicals (increasing cost of chemicals due to above inflation increases, water demand and recent the intense rainfall that created conditions for the prevalence of suspended solids (mud) impacting on the treatment process for water);
- Security costs (as a result of extortions and high levels of violence and crime);
- Repairs and maintenance costs (due to ageing infrastructure, normal wear and tear, and vandalism); and
- Employee costs (required to operate water treatment plants, pump stations, and sanitation networks) are impacted by National agreements.

Table 2: Increases in Operational Cost

To mitigate these risks, the City is implementing energy efficiency measures and exploring renewable energy options to lower operational costs, as well as updating the financial management and models to respond to the change in levels of load shedding. We need to make adequate provision for the increased costs of chemicals and labour. The City is also exploring the use of a hybrid security model (inclusive of the Safety and Security Directorate) to supplement W&S internal Law enforcement. The purpose is to reduce the use of private security in certain areas such as Philippi, Gugulethu and Manenberg where private security come under increasing attack.

2.3.3 Capital Expenditure

Capital investment has been prioritized to address critical infrastructure needs. The City is increasingly focusing on large capital projects to diversify sources of water through New Water Programme, to upgrade aging infrastructure, reduce non-revenue water (NRW), replacement of water distribution network, meter replacement and the installation of smart metering systems.

The Mayoral Priority Project also increase the focus on projects to improve performance of sanitation systems and inland water quality, the upgrade of wastewater treatment plants, sewer pipe replacements as well as sewer pump stations.

Furthermore the City's commercial plans aim to streamline operations, reduce costs, and increase revenues, contributing positively to the financial health of the services provided.

2.4 Water and Sanitation Tariffs

The City's tariff structure is designed to be progressive and cost reflective. For residential households, an Increasing block tariff (IBT) structure is used to promote water conservation while ensuring affordability for lower-income households. This is identified as a mechanism to address problems of unequal income distribution through cross-subsidisation between high- and low-income households, although the City has observed a recovery of domestic consumption levels still approximately 20% below levels before the start of the drought. Furthermore social/indigent tariffs are included for vulnerable groups, ensuring equity and inclusiveness in access to water services.

Water tariffs are structured as a two-part tariff with fixed and volumetric charges.

Volumetric charges are tiered charges based on the volume of water consumed. The City uses an IBT system where higher consumption attracts higher rates per kilolitre. For non-domestic users a fixed charge and a flat tariff is charged per kilolitre for domestic users. For non-domestic users a fixed charge and a flat tariff is charged per kilolitre. The current water tariffs are attached as Annexure A for water consumptive tariffs and Annexure C for water miscellaneous tariffs.

Sanitation tariffs are calculated based on a percentage of water consumption. For domestic properties, the volume of wastewater is assumed to be 70% of water consumption. The tariffs are also tiered, following a similar block structure to the water tariffs. For non-domestic the volume of wastewater is assumed to be between 90 and 95% of water consumption unless otherwise indicated and would be based on a review through policy approved processes. The current tariffs are attached as Annexure B for sanitation consumptive tariffs and Annexure D for sanitation miscellaneous tariffs.

The City has annual tariff increases to ensure cost recovery and to fund ongoing impact of capital projects. The increases are benchmarked against inflation and the rising cost of service delivery. The current tariffs are structured to balance affordability with the need for financial sustainability, and future tariff adjustments are expected to follow a similar approach as depicted in the table below.

During the financial sustainability technical assessment performed in 2021/22 financial year, a need to review the water and sanitation tariff structure was recommended and the consultation is under way to implement a two part sanitation tariff structure with effect from 01 July 2025.

2.4.1 Key Factors Influencing Tariff Adjustments

Key factors which influences the way in which tariffs are structured and adjusted are:

Rising operational costs, particularly in fuel, energy, chemicals and security have a direct impact on the cost of water and sanitation service delivery. The City aims to recover these costs through tariff adjustments, while maintaining affordability for consumers. In addition, a significant cost are required towards maintaining and upgrading aging infrastructure. Given the growing demand for services due to population growth (estimated at an annual growth of 1.8% - Stats SA data), there is continuous pressure to invest in expanding the network and upgrading treatment facilities.

Environmental and Regulatory Compliance with National and Provincial environmental standards requires investment in technologies that ensure the quality of treated water and wastewater meets stringent regulatory requirements. This compliance, while necessary, adds to operational costs.

Water Conservation Initiatives

The City has maintained a focus on water conservation and demand management initiatives, particularly following the recent drought. Tariffs are designed to encourage responsible water usage, especially in higher consumption blocks, while ensuring basic water needs are met affordably.

The City has developed and is implementing a Water Conservation and Water Demand Management Strategy with a focus on the following programmes:

- Pressure management
- Leak detection and repairs
- Zonal water management
- Meter and pipe replacement

2.5 Addressing Commercial and Social Challenges

2.5.1 Billing Accuracy

Enhanced billing accuracy has seen steady increases to actual readings and billing of accounts based on actual readings. Estimates have also been reducing through improved data management which reduces disputes and unpaid bills. The adoption of AMI is a strategic investment that will further lead to more accurate billing, improved customer satisfaction, and enhanced overall business efficiency. Below graph provide the meter reading performance per user category.

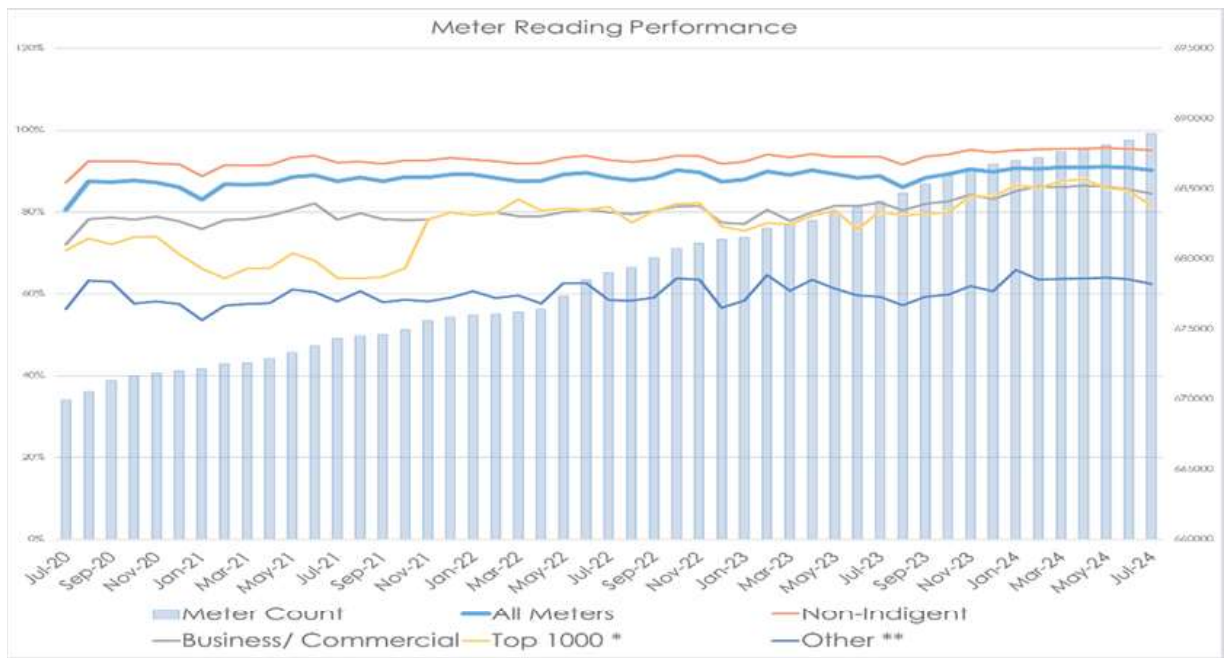


Figure 3: Water meter reading performance per user category

2.5.2 Collection effectiveness and efficiency

Debt management strategies are in place to target outstanding payments, with an emphasis on arrears recovery through customer engagement and enforcement of service restrictions and disconnections in cases of non-payment in adherence to the City's approved policies. The City continuously streamline collections by introducing more flexible payment methods, including online platforms, mobile applications, and partnerships with third-party service providers. though implementation of effective debt management and revenue collection process that has resulted to the Directorate maintaining an above 90% collection ratios most part of 2023/24 financial year and is working towards achieving a 95% collection ratio by the 2028/29 financial year.

The reduction in collection ratios in financial years 2016/17 and 2017/18 was as a result of severe water restrictions, to mitigate "Day zero". While necessary to lower consumption levels the significantly high restrictive tariffs resulted to household struggling payment for the service.

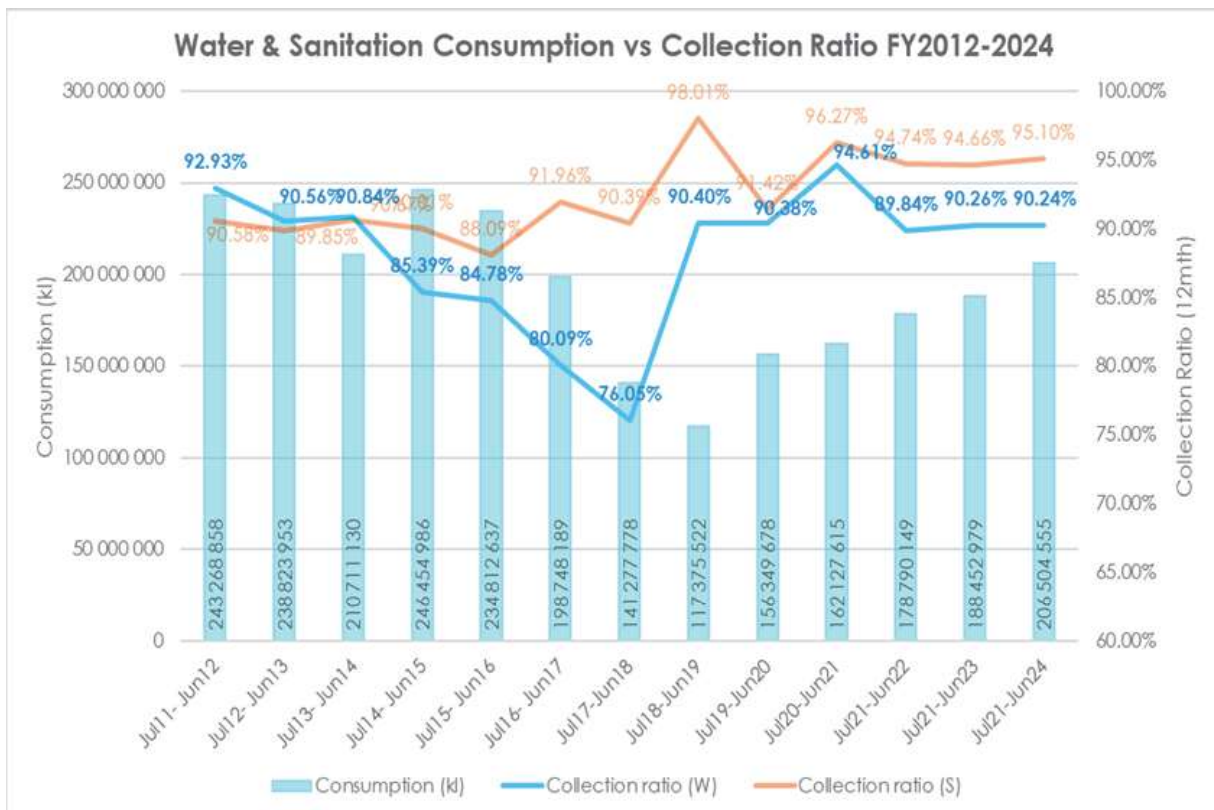


Figure 4: Water and Sanitation consumption vs collection ratio per financial year

2.5.3 Social Challenges

The City has an approved Indigent Policy and allocates free basic water and sanitation services to households that qualify under the City's social/indigent support programs. In addition, community awareness programs and communications are introduced to educate residents on water conservation, payment plans, and the benefits of regular payments.

Targeted approaches to assist vulnerable and indigent households (both approved and deemed indigent and informal settlements by allocating free basic services for Water and Sanitation in line with the City's approved bylaws and policies, legislations and guidelines.

3 Infrastructure and Capital Projects

3.1 Prioritised Capital and Operational Projects

The City's Water and Sanitation infrastructure investment is primarily guided by master planning conducted by the Directorate. Previous plans, completed in 2015 and later reviewed in 2018, identified projects to address growing water demand and operational needs. However, budget constraints, reduced demand, strategic shifts, and other factors have led to delays in implementing some projects, including portions of the Bulk Water Augmentation Scheme (BWAS).

Specific engineering and capital infrastructure projects identified can be summarised as;

- Implementation of the New Water Programme
- Expansion/Upgrades of Wastewater Treatment works – Zandvliet, Potsdam and Macassar
- Pipe Replacement Programme (Water and Sewer), currently have a target of 50km and 100km per FY respectively
- Upgrade of sewer pump stations
- Implementation of water conservation initiatives
- Zonal water management
- Installation of generators and UPS/inverters
- Meter replacement and AMI roll-out
- Treated effluent re-use roll-out to offset potable water demand.

These investments are designed to enhance operational effectiveness and contribute to the financial sustainability of the water and sanitation services.

3.1.1 Water Strategy infrastructure investment

Water demand in Cape Town has exceeded pre-drought levels (1,000Mℓ/d), and below-average rainfall in the Western Cape underscores the need for alternative water sources. The timely implementation of the New Water Project (NWP) is essential to maintain the city's water security. Despite challenges, achieving a resilient water system by 2030 remains a viable goal. The updated project timeline is outlined in the table below.

While the City's New Water Program addresses future water demand, the Bulk Water Master Plan highlights infrastructure deficiencies. To ensure long-term water supply resilience, we've developed an Infrastructure Stability Program. This includes:

- **Pipeline refurbishment:** Updating aging pipelines, some over a century old.
- **Water treatment plant upgrades:** Restoring the full capacity of our five main plants, including Faure, which hasn't been significantly modernized since its construction.
- **Infrastructure improvements:** Enhancing system flexibility and robustness to avoid supply constraints tied to individual plants.

The City wants to pursue water reuse as an important part of the diversified mix of new water sources to take us into a more secure shared water future, the first of these reuses schemes is the Faure New Water Scheme (FNWS). It will treat approximately 70Mℓ/d of water daily from Zandvliet Wastewater Treatment Works, ensuring it meets drinking water standards. The treated water will be blended with existing sources and distributed.

A rigorous design review, including an independent panel, assessed the FNWS. Initially, we considered internal or outsourced management. However, due to budgetary constraints, we're now prioritizing operational expenditure (OPEX). This could involve external financing or a Public-Private Partnership (PPP).

Water and Sanitation is committed to maximizing wastewater reuse to meet water demand and create a resilient, water-sensitive city. The Water Reuse Strategic Study aims to identify and develop potential reuse schemes, including Direct Potable Reuse (DPR) and Indirect Potable Reuse (IPR). After evaluating various sites, the study identified ten with reuse potential. Sixteen sites were excluded due to factors like high industrial influent, small wastewater treatment works (WWTWs), or lack of surplus effluent. The study also highlighted the need to balance the demand for treated effluent for non-potable uses with its potential use as a source water for advanced water treatment.

The ability to expand the reuse schemes largely depends upon the final effluent quality at the respective Wastewater Treatment Works. At present wastewater treatment infrastructure faces many challenges with eight (8) facilities currently failing to meet Green Drop standards.

the city is investing in upgrades to Macassar, Potsdam, Athlone, and Wesfleur. These improvements will significantly enhance the performance of these treatment works. Additionally, the Zandvliet Wastewater Treatment Works (WWTW) recently completed its first phase of expansion. Phase 2 is scheduled for 2028/2029. This expansion aligns with Cape Town's commitment to becoming a water-sensitive city.

3.1.2 Operational Improvement

Decades of pollution have degraded its rivers, vleis, and estuaries. Sewer spills, land invasions, and inadequate wastewater treatment capacity have exacerbated the problem. These issues not only harm the environment but also hinder economic growth and quality of life for residents.

To address these challenges, the City's Sanitation and Inland Water Quality (S&IWQ) Mayor's Priority Programme focuses on:

1. **Upgrading infrastructure:** Investing in critical infrastructure networks while ensuring sufficient capacity for future development.
2. **Improving sanitation:** Addressing sewer spills, reducing pollution, and enhancing water quality in vleis, rivers, and estuaries.
3. **Engaging with communities:** Developing programs to prevent land invasions, relocate informal settlements, and manage solid waste.
4. **Strengthening partnerships:** Collaborating with organizations to achieve shared goals.

By implementing these strategies, Cape Town can protect its ecosystems, improve water quality, and create a more sustainable and resilient city. The MPP focuses on enhancing wastewater treatment, sewer networks, and pump stations to reduce pollution, address development constraints, and restore recreational vleis. Key objectives include:

- **Reducing sewer spills:** Minimizing frequency, duration, and impact of spills, improving response times, and enhancing sewer system performance through proactive maintenance.
- **Improving pump station reliability:** Reducing spills, improving performance, and mitigating environmental impact.
- **Increasing wastewater treatment capacity:** Expanding capacity, improving effluent quality, and addressing development constraints.
- **Improving water quality:** Enhancing water quality in catchment areas, reopening recreational vleis, and exploring bioremediation opportunities.
- **Strengthening partnerships:** Fostering community awareness, collaboration with residents, and partnerships with relevant stakeholders.

Progress will be measured through:

- **Implementation progress:** Tracking adherence to the baseline program.
- **Key performance indicators (KPIs):** Setting short-, medium-, and long-term targets related to water quality and program objectives

The below summary is a cost baseline per work stream for the previous two (2) financial years as well as the current and future financial years.

Table 5: Budget for sewer infrastructure interventions

Work stream	Sub item	Budget type allocation	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Sewer network spills	Pipe Replacement (and upgrading) Programme	CAPEX	R342 195 513	R810 826 277	R584 676 000	R455 696 800
		OPEX	R5 600 000	R5 600 000	R5 600 000	R5 600 000
	Preventative Maintenance	OPEX	R35 486 212	R60 035 523	R84 612 299	R87 217 914
	Rapid Response	CAPEX	R7 000 000	R10 000 000	R10 000 000	R10 000 000
		OPEX	R3 000 000	R3 000 000	R3 000 000	R3 000 000

Table 6: Budget allocation for pump station

Work stream	Sub Item	Budget type allocation	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Pump station performance	Upgrade & Refurbishment	CAPEX	R103 000 000	R281 500 000	R314 000 000	R67 000 000
	Repairs & Maintenance	CAPEX	R39 000 000	R46 600 000	R52 400 000	R51 000 000
		OPEX	R159 503 847	R164 374 591	R169 488 873	R174 858 869
	Monitoring and Reporting (Near real time)	OPEX	R3 000 000	R3 000 000	R3 000 000	R3 000 000

Table 7: Budget for Wastewater upgrades

Work stream	Sub item	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Wastewater treatment capacity	Potsdam Upgrade	R200 000 000	R436 000 000	R480 000 000	R434 000 000
	Zandvliet Upgrade	R185 800 000	R23 600 000	R0	R0
	Macassar Upgrade	R12 000 000	R215 000 000	R415 000 000	R245 000 000
		R22 346 775	R2 011 210	R263 590 451	R622 891 740

Table 8: Budget for Catchment, Stormwater and River Management (CSRM) interventions

Work stream	Sub item	Budget type allocation	FY22/23	FY23/24	FY24/25	FY25/26
Pollution of waterways	Table Bay Pollution Response (Specifically Rietvlei and Milnerton Lagoon)	CAPEX	R16 000 000	R21 000 000	R31 000 000	R16 000 000
		OPEX	R1 500 000	R5 840 000	R55 840 000	R1 840 000
	Zeekoevlei Pollution Response	CAPEX	R0	R1 500 000	R5 500 000	R43 000 000
		OPEX	R3 120 000	R41 160 000	R19 201 600	R1 244 864
	Zandvlei Pollution Response	CAPEX	R1 044 356	R805 298	R3 143 251	R13 200 331
		OPEX	R460 000	R5 473 600	R35 487 744	R502 453
	Water Quality Improvement Plan	OPEX	R946 029	R980 830	R1 017 023	R1 054 664

Table 9: Budget for enhancement of the Communications Branch

Work stream	Sub item	Budget type allocation	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Communication & Partnerships	Communications	OPEX	R4 500 000	R4 500 000	R4 500 000	R4 500 000

Table 10: Pump station performance work stream budget allocation

Work stream	Sub item	Budget type allocation	FY 22/23	FY 23/24	FY 24/25	FY 25/26
Pump station performance	Upgrade & refurbishment	CAPEX	R103 000 000	R281 500 000	R314 000 000	R67 000 000
	Repairs & maintenance	CAPEX	R39 000 000	R46 600 000	R52 400 000	R51 000 000
		OPEX	R159 503 847	R164 374 591	R169 488 873	R174 858 869
	Monitoring and reporting (near real time)	OPEX	R3 000 000	R3 000 000	R3 000 000	R3 000 000

As reflected in the challenges, this is a short to medium term approach as part of ongoing improvements which was boosted by the platform of MPP that prioritised these interventions.

3.1.3 Water Demand Management and Conservation Strategies

The SA Constitution and the Water Services Act requires that a municipality's Water Authority engage in WCWDM interventions to reduce water demand and limit expensive water augmentation projects which also typically gave long lead times. CoCT water services (WS Directorate) has a history of pursuing Water Conservation and water demand management interventions. These were driven by clear strategic plans with the most recent being the 2017 WCWDM strategy. The new strategy is currently under formulation. The tables below shows the targeted saving in 2004 and 2017 respectively.

Table 11: Targeted savings in 2004 (WCWDM strategy 2017) and associated activities

	Inefficiency component	Max Saving	% savings target	Target Savings (Ml/day)	Activity to achieve saving	Primary necessity
1	Reduction of NRW (leaks only)	93.0	60%	55.8	Comprehensive reticulation management programme	Financial sustainability of Council
2	Inefficient water consumption in low income areas	52.2	75%	39.2	Comprehensive management programme in low income areas	Financial sustainability of Council Affordability for consumer
3	Inefficient water consumption of business / industry	77.0	80%	61.6	Behaviour change Retro-fitting Leak repair	Water resource consideration
4	Inefficient water	135.6	75%	101.7	Behaviour change Retro-fitting	Water resource considerations

	Inefficiency component	Max Saving	% savings target	Target Savings (Ml/day)	Activity to achieve saving	Primary necessity
	consumption of domestic, affluent consumers				Leak repair / flow limiter Effective tariff	
5	Treated effluent and alternative water resources	72.0	91%	65.5	Effluent recycling plants Well and bore holes Rain harvesting Unconventional resources	Water resource considerations
	Total	429.8		323.8		

Table 12: Targeted savings in 2017 (WCWDM Strategy 2017) and associated activities

	Inefficiency component	Max Saving	% savings target	Target Savings (Ml/day)	Activity to achieve saving	Primary necessity
1	Reduction of NRW (Leaks only)	80.7	51%	40.85	Comprehensive Reticulation management programme	Financial sustainability of Council
2	Inefficient water consumption in low income areas	34.9	45%	15.70	Comprehensive management programme in low income areas	Financial sustainability of Council Affordability for consumer
3	Inefficient water consumption of Domestic, Affluent consumers	83.3	60%	50.09	Behaviour change Retro-fitting Leak repair Effective tariff	Water resource consideration
4	Inefficient water consumption of Industry	29.0	40%	11.61	Behaviour change Retro-fitting Leak repair / flow limiter	Water resource considerations
5	Treated Effluent and Alternative water resources	80.5	82%	66.01	Effluent recycling plants Well and bore holes rain harvesting Unconventional resources	Water resource considerations
	Total	308.4		184.26		

These tables indicate clearly outlines the intervention proposed providing evidence that the Practice WC and WDM is well inrenched in the WS Directorate.

Pressure and zone management of the Water supply system is well developed with a current coverage of just over 67.3% and continually expanding. There is a significant investment planned to achieve full coverage with an estimated split of 80% pressure managed and 20 % district metered area.

Table 13: Capital budget for pressure management for the next three years

WBS Element Description	Fund Source	Approved Budget 2024/25	Approved Budget 2025/26	Approved Budget 2026/27
Pressure Management: COCT FY25	1 EFF	15 000 000	0	0
Pressure Management: COCT FY26	1 EFF	0	10 000 000	0
Pressure Management: COCT FY27	1 EFF	0	0	7 500 000

This coverage comes with fully logged monitoring of flow and pressure allowing to analyse consumption and losses more accurately allowing more targeted interventions with regards to operations, pressure management, pipe replacement, leak detection and NRW. The growing number indigent households has necessitated the need for on-site leak detection and repair.

Treated effluent is a valuable resource that can help the City conserve water, protect the environment, and achieve economic benefits. The rate of treated effluent infrastructure expansion is directly related to the quality of treated effluent produced WWTW. By investing in Wastewater Treatment and reuse infrastructure, the intention is to ensure a more sustainable and resilient water future for our residents. Currently the treated effluent interventions contribute to water conservation is considerable as it attempts to increasingly replace the potable water that would be used for irrigation and industrial use. The current usage is just under 6% (16.5 Ml/d) with potential to grow significantly. The planed bulk water reuse of 70Ml/day will increase this percentage significantly.

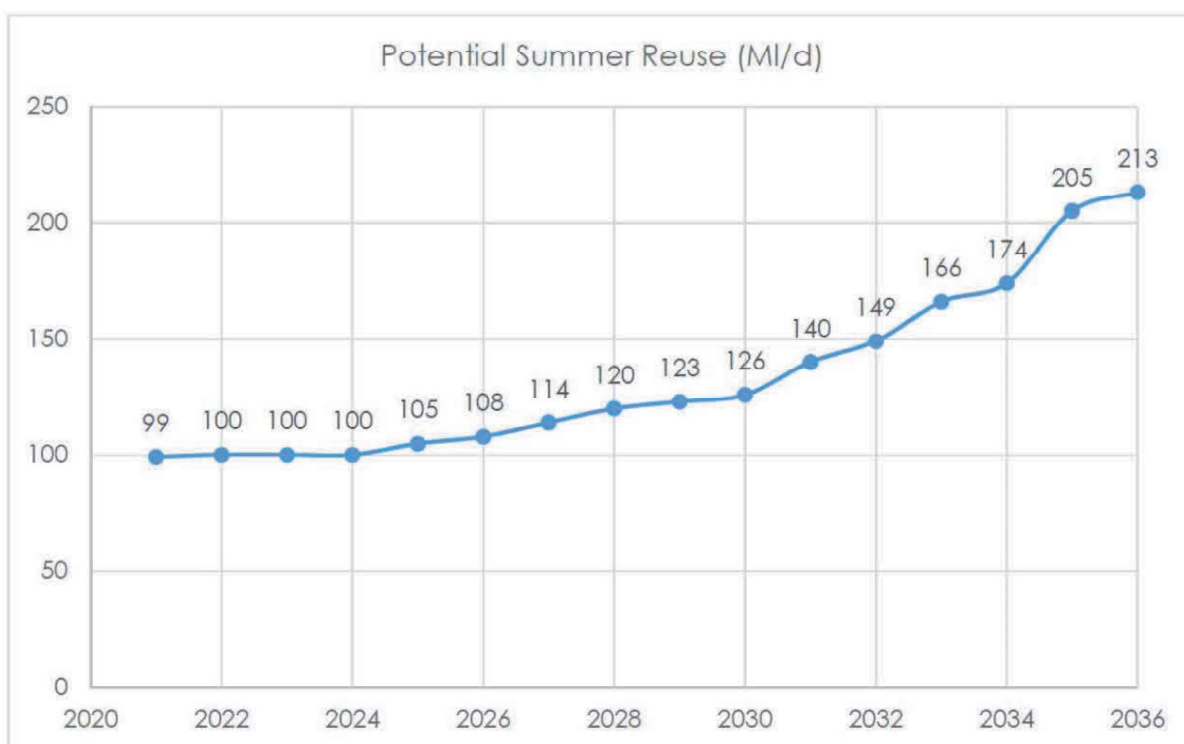


Figure 6: Annual potential reuse daily supply volumes

3.2 Capex and Infrastructure Plan

The Water and Sanitation capital expenditure plan (capex) has both the 3 year and 10 year Long Term Financial Plan (LTFP) perspectives, detailing expected investments in infrastructure with funding sources

3.3 Key Performance Indicators and Milestones

This section outlines the critical performance indicators and milestones that will be used to track the progress and success of the Water and Sanitation Reform Plan. These indicators cover various aspects of the plan, including strategy development, asset management, service delivery, financial management, and stakeholder engagement.

Table 17: Next Steps

What	Who	When
Regular feedback on the implementation of the Water Strategy through the Outlook report	Bulk Services Department	Annually
Develop a Water and Sanitation Strategy (a beyond 2030 Water and Sanitation strategy)	ED, All Departments	End FY 2027, then every 5 years
Review and Update of the Asset Management SOP's	ED, Technical Services Department	End FY 2025
Ongoing Quarterly Asset Management Steer Com	Technical Services Department	Quarterly
WCWDM Strategy Update	Technical Services Department	End FY
AMI progress report	Customer Services Department	Annual Update
W & S Directorate separate (from the City) and independent Audited Financial Statement produced and published	ED, Commercial and Financial Services Department	End FY 2025, then annually
Development of W&S SLA agreements with all Corporate Directorates and other service providers to intentionally strengthening single point of	ED, Technical Services	End FY 2027, draft and complete outstanding SLA's

What	Who	When
accountability. This will include close scrutiny of corporate services		
Mechanism for Performance monitoring and evaluation of SLA's put in place	ED, Technical Services	End FY 2027
Lobby the CM to subdelegate powers to effectively manage SLA's	ED	End FY 2025
Ongoing monthly Collaboration meetings with the CFO, chaired by the W&S ED – regarding the Reform Plan /Process	ED	Quarterly
Develop a document to define the financial relationship between WS Directorate and City (addressing financial transparency)	ED, Commercial Services	End FY 2026
Equitable Share Formula allocation agreement	ED, Directors	Annually
Review Development Contributions	ED, Directors	Annually
Review medium and long term financial sustainability model	Directors	Annually
Investigate Directorate capacity to produce AFS	Commercial Services	End 2025
HR Process and governance arrangements reviewed	HRBP	End Feb 2025
Vacancy Management Review Forum	HRBP/Financial Services	Monthly
Analyse, report and consider moving towards a SPoA: Trading Services Corporate Support	ED, HRBP	End FY 2025
Establish a Project Management Office (PMO) which will incorporate the Capital and Contracts Management	ED, HRBP	End Jan 2025

4 Funding and Implementation

4.1 Capital Allocation

The current budget plans indicate a strong commitment from the City to prioritize funding for water and sanitation projects, with increased allocations identified in the city's budget, year on year since 2020/21 financial year

The City has developed a comprehensive funding strategy that balances the affordability of funding with tariff considerations while actively exploring a wide range of financing opportunities, including support from development banks. Approved capital expenditures funded by loans are being fully financed through this strategy.

In terms Water and Sanitation project prioritisation, key projects such as Desalination, the Faure Water Reuse Scheme, and the Cape Flats Wastewater Treatment Works Bio Beneficiation, are being evaluated for potential funding through Public-Private Partnerships (PPPs). The City is currently assessing the viability of these PPPs through the Section 78 process, with each project advancing through different stages of evaluation. Council will make a decision as to whether we apply PPP or provide internally.

4.2 Implementation Capacity

Since 2019/20 financial year, Water and Sanitation has continuously increase year on year Capital expenditure, demonstrating its capability to successfully implementing projects, with effective spending on infrastructure improvements. The table and graph below provides an overall indication of the ability to not only be able to commit funds but also ensure that it is spent accordingly.

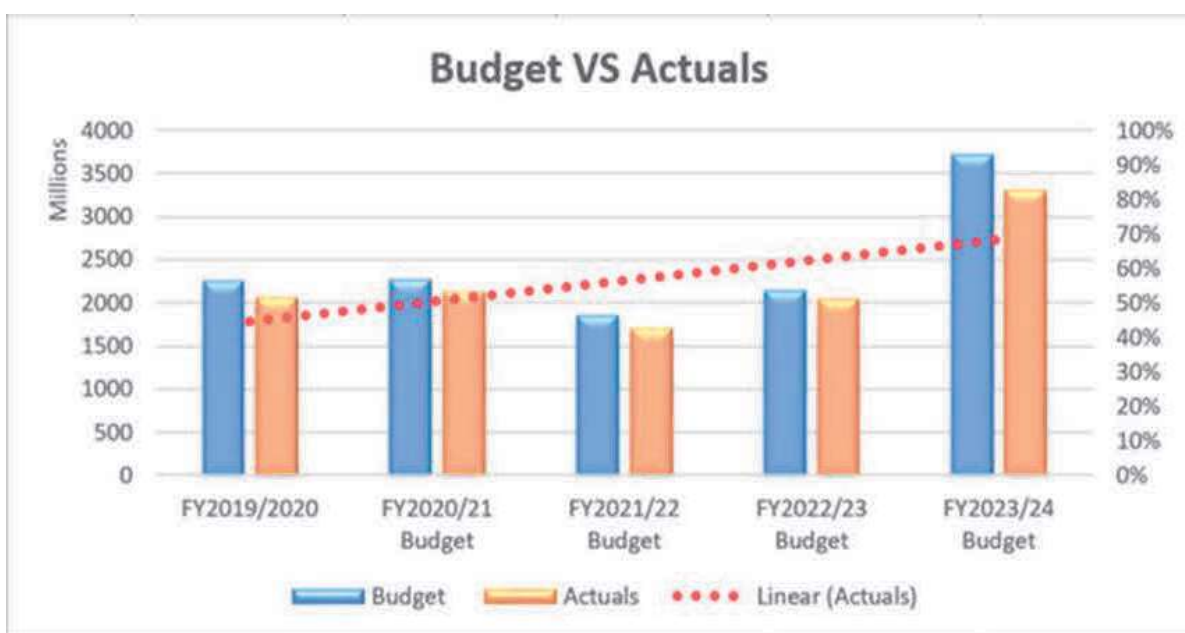


Figure 7: Annual budget versus actuals for Water and Sanitation

Table 20: Historical track record of trading service expenditure

YEAR	FY2019/20	FY2020/21	FY2021/22	FY2022/23	FY2023/24
Budget	2 263 615 289	2 276 190 900	1 864 656 150	2 160 586 514	3 727 293 331
Actuals	2 077 974 712	2 141 570 321	1 714 005 572	2 051 600 467	3 317 916 738
% Spent	92%	94%	92%	95%	89%

4.3 Project Implementation Capacity and Timelines

With the increase in Capital budget a need for additional resources has been identified and additional resources has been obtained through Strategic Management Framework(SMF) processes and recruitment processes are under way where funding provisions has been allocated. Water and Sanitation is also exploring the use of Labour to Capital principle to reduce the impact on employee cost and operating cost.

Through demand plan management and Procurement (Supply Chain Management Processes), Water and Sanitation has clear timelines to ensure contract activation and project readiness, with clear timelines for project implementation, ensuring accountability and tracking of progress. The Water and Sanitation - Capital and Contract Management branch monitors implementation progress through regular reporting mechanisms to track the progress of projects and financial performance against established benchmarks.

4.4 The use of equitable share

The equitable share allocated to the water and sanitation services is R1.33b for 2024/25 financial year. However, the allocation formula to trading services directorates needs to be known to Directorates. All income streams must be clearly defined and agreed upon.

For the 2024/25 financial year, the equitable share contribution represented approximately 13% of revenue requirements. These contributions are allocated first to the cost of serving informal settlements and then to the cost of serving indigent households living in properties valued at R500

000 or less. The cost of informal settlement water and sanitation provision is about R907 million (8.8% of total costs), is fully covered by the equitable share. However, with increase in informality especially after the COVID pandemic and continuous demands for Water and Sanitation to services the communities, it is envisaged that expenditure demands are likely to grow at a rate that is greater than inflation and this will use an increasing larger share of the equitable share grant.

Households living on properties with a municipal valuation of below R500 000, as well as registered/approved indigent households (based on application), do not pay for water and sanitation. The cost of providing this service is approximately R1.07b per year (10.4% of total costs). This cost has been funded partly by the equitable share and partly by tariffs. In the future as the equitable share is increasingly diverted to meet rising informal settlement costs, this need will have an impact on tariffs.

5 Financial Summary

5.1 Debt Levels and Funding Gaps

The current debt levels are outlined in the Annual Financial Statements, indicating the city's obligations related to water and sanitation services. Future projections suggest that borrowing levels may increase due to planned capital expenditures, but these investments are anticipated to generate sufficient returns through improved operational efficiencies and revenue generation.

The City has developed a comprehensive funding strategy that balances the affordability of funding with tariff considerations while actively exploring a wide range of financing opportunities to fund the gaps, including support from development banks. Approved capital expenditures funded by loans are being fully financed through this strategy.

In terms of Water and Sanitation project prioritisation, key projects such as Desalination, the Faure Water Reuse Scheme, and the Cape Flats Wastewater Treatment Works Beneficiation, are being evaluated for potential funding through Public-Private Partnerships (PPPs). The City is currently assessing the viability of these PPPs through the Section 78 process, with each project advancing through different stages of evaluation.

The Water and Sanitation Directorate has also submitted applications for the Budget Facility for Infrastructure (BFI) grant to fund major capital projects. Although not yet successful, will continue exploring this grant and other financing opportunities to drive future infrastructure development.

5.2 Overall Financial Summary

The financial summary includes an overview of the projected operational expenditures (opex) and capital expenditures (capex).

Key figures are given below for the current financial year FY 2024/25:

- Projected Operational Expenditures including Debtors Working Capital Reserve and Collection Ratios:
 - o Please refer Annexure E
- Projected Capital Expenditures (Capex):
 - o Please refer paragraphs 3.2 and 4.1 above

6 Conclusion

The Water and Sanitation financial data, operational plans and policies for the City of Cape Town present a comprehensive approach to enhancing operational effectiveness and financial solvency. With well-defined commercial strategies, targeted capital investments, and a commitment to addressing social and commercial challenges, the plans position the city to improve service delivery while ensuring financial sustainability.

The integration of private, development finance and grants alongside a clear implementation capacity and timelines, underscores the city's commitment to successfully executing these plans. The anticipated financial impacts and projections provide a roadmap for navigating future challenges and opportunities in the water and sanitation sector.

7 Annexures

Annexure A: Water – Level Waterwise – Consumptive Tariffs

Annexure B: Sanitation - Level Waterwise – Consumptive Tariffs

Annexure C: Water – Miscellaneous Tariffs

Annexure D: Sanitation – Miscellaneous Tariffs

Annexure E: Projected Operating Expenditure

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
		WATER CONSUMPTION : METERED								
A		POTABLE WATER:								
1.1		Domestic Full - Non Indigent		Water which is used predominantly for domestic purposes and supplied to single residential properties.						
	S	Step 1 (0 ≤ 6kl)	Per kl		18.34	21.09	y	19.59	22.52	6.80%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		25.20	28.98	y	26.92	30.96	6.80%
		Step 3 (>10.5 ≤ 35kl)	Per kl		34.25	39.39	y	36.58	42.07	6.80%
		Step 4 (> 35kl)	Per kl		63.20	72.68	y	67.50	77.63	6.80%
1.2		Domestic Full - Indigent		Water which is used predominantly for domestic purposes and supplied to single residential properties. Also refer to the Credit Control and Debt Collection Policy as well as Tariff Policy.						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 3 (>10.5 ≤ 35kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 4 (> 35kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
1.3		Domestic Cluster - Non Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. An allowance to apply the tariff structure per unit per month upon submission of a signed affidavit stating the number of units/refer tariff policy.						
	S	Step 1 (0 ≤ 6kl)	Per kl		18.34	21.09	y	19.59	22.52	6.80%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		25.20	28.98	y	26.92	30.96	6.80%
		Step 3 (>10.5 ≤ 35kl)	Per kl		34.25	39.39	y	36.58	42.07	6.80%
		Step 4 (> 35kl)	Per kl		63.20	72.68	y	67.50	77.63	6.80%
1.4		Domestic Cluster - Social Housing Institutions - City Partners		Cluster Development Properties registered in the name of a SHRA-accredited Social Housing Institution and, registered as City Partners – Full and Conditional.						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		25.20	28.98	y	26.92	30.96	6.80%
		Step 3 (>10.5 ≤ 35kl)	Per kl		34.25	39.39	y	36.58	42.07	6.80%
		Step 4 (>35kl)	Per kl		63.20	72.68	y	67.50	77.63	6.80%

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
1.5		Domestic Cluster - Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. An allowance of 15kl per unit per month at zero cost upon submission of a signed affidavit stating the number of units/refer tariff policy. Categorisation will be subject to the approval of Indigency of the Full Development.						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 3 (>10.5 ≤ 35kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 4 (> 35kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
1.6		Domestic - Backyard Dwellers		Single separate meter device to backyard occupants. An allowance of 10.5kl per structure per month at zero cost for registered backyard unit (signed affidavit stating occupants and the number of units will be required) after single separate meter device has been installed. (Not currently active)						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
2.1		COMMERCIAL	Per kl	Water supplied to premises predominantly of commercial nature.	32.84	37.77	y	35.07	40.33	6.80%
2.2		INDUSTRIAL	Per kl	Water which is used in manufacturing, generating electricity, land-based transport, construction or any related purpose.	32.84	37.77	y	35.07	40.33	6.80%
3		OTHER:								
3.1		Government	Per kl	National and Provincial Departments.	32.84	37.77	y	35.07	40.33	6.80%
3.2	FCR	Schools/Educational Institutions/Sporting Bodies/Religious Institutions	Per kl		32.84	37.77	y	35.07	40.33	6.80%
3.3		Miscellaneous	Per kl	All consumers who do not fall within the above categories, including Hydrant Standpipes.	32.84	37.77	y	35.07	40.33	6.80%

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
3.4		Charities / PBO / NPO	Per kl	Charities / PBO / NPO (including NPO's for animal shelters / early childhood development / youth development / local community museum facilities.	27.12	31.19	y	28.96	33.31	6.80%
3.5		ACCOMODATION FOR THE VULNERABLE								
3.5.1		Homeless people shelters / Homes catering for the health of physically or mentally challenged individuals/Homes for Children		Homeless People shelters / homes catering for the health of physically or mentally challenged individuals, children's homes and which has applied for and been registered as such shelter by the relevant Council Committee/Body. A sworn affidavit must accompany the application indicating the number of people normally accommodated at the facility.						
	FCR	Step 1 (0 ≤ 0.75 kl per person)	Per kl per person		0.00	0.00	y	0.00	0.00	0.00%
	FCR	Step 2 (>0.75 kl per person)	Per kl per person		27.12	31.19	y	28.96	33.31	6.80%
3.5.2		Old Aged Homes as defined		Registered old aged homes as defined. A sworn affidavit must accompany the application indicating the number of people normally accommodated at the facility.						
	FCR	Step 1 (0 ≤ 0.75 kl per person)	Per kl per person		0.00	0.00	y	0.00	0.00	0.00%
	FCR	Step 2 (>0.75 kl per person)	Per kl per person		27.12	31.19	y	28.96	33.31	6.80%
3.6		Vulnerable Groups (Subsistence farming)		As defined in the City's Urban Agriculture Policy for approved and registered groups, considered on an annual basis.						
	FCR	Step 1 (0 ≤ 10 kl)	Per kl	Free allocation. Corresponding Sanitation consumption not free.	0.00	0.00	y	0.00	0.00	0.00%
	FCR	Step 2 (>10 kl)	Per kl	Normal tariff	The normal tariff for the premises on which the facility is situated	The normal tariff for the premises on which the facility is situated	y	The normal tariff for the premises on which the facility is situated	The normal tariff for the premises on which the facility is situated	

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
4		DEPARTMENTAL:								
4.1	FCR	Municipal (including Municipal Standpipes)	Per kl	Departmental use	32.84		n	35.07		6.80%
4.2		Full - Non Indigent		Water which is used predominantly for domestic purposes and supplied to single residential properties.						
	S	Step 1 (0 ≤ 6kl)	Per kl		18.34		n	19.59		6.80%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		25.20		n	26.92		6.80%
		Step 3 (>10.5 ≤ 35kl)	Per kl		34.25		n	36.58		6.80%
		Step 4 (> 35kl)	Per kl		63.22		n	67.50		6.77%
4.3		Domestic Full - Indigent		Water which is used predominantly for domestic purposes and supplied to single residential properties. Also refer to the Credit Control and Debt Collection Policy as well as Tariff Policy.						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00		n	0.00		0.00%
		Step 3 (>10.5 ≤ 35kl)	Per kl		0.00		n	0.00		0.00%
		Step 4 (> 35kl)	Per kl		0.00		n	0.00		0.00%
4.4		Cluster - Non Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. An allowance to apply the tariff structure per unit per month upon submission of a signed affidavit stating the number of units/refer tariff policy.						
	S	Step 1 (0 ≤ 6kl)	Per kl		18.34		n	19.59		6.80%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		25.20		n	26.92		6.80%
		Step 3 (>10.5 ≤ 35kl)	Per kl		34.25		n	36.58		6.80%
		Step 4 (> 35kl)	Per kl		63.22		n	67.50		6.77%

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
4.5		Cluster - Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. An allowance of 15kl per unit per month at zero cost upon submission of a signed affidavit stating the number of units/refer tariff policy. Categorisation will be subject to the approval of Indigency of the Full Development.						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00		n	0.00		0.00%
		Step 3 (>10.5 ≤ 35kl)	Per kl		0.00		n	0.00		0.00%
		Step 4 (> 35kl)	Per kl		0.00		n	0.00		0.00%
4.6		Backyard Dwellers		Single separate meter device to backyard occupants. An allowance of 10.5kl per structure per month at zero cost for registered backyard unit (signed affidavit stating occupants and the number of units will be required) after single separate meter device has been installed. (Currently active)						
	S	Step 1 (0 ≤ 6kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>6 ≤ 10.5kl)	Per kl		0.00		n	0.00		0.00%
5	MR	MISCELLANEOUS - EXTERNAL	Per kl	All consumers that are supplied outside of the City of Cape Town.	49.37	56.77	y	52.73	60.64	6.80%
6		AVERAGE COST OF WATER	Per kl	This tariff relates to the inventory tariff for the potable reticulated water.	22.77		n	24.32		6.81%
7		BULK TARIFF		The tariff is exclusive of Water Research Commissions Levy. Only for Bulk Supply to other Municipalities and for cost recovery from Water Services Reticulation of the City of Cape Town.						
7.1	FCR	Bulk Tariff - External Customers	Per kl	External Customers	6.38	7.34	y	6.42	7.38	0.63%
7.2	FCR	Bulk Tariff - Reticulation	Per kl	Reticulation/Inventory Tariff	6.38		n	6.42		0.63%

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
8.1		Bulk Raw Water Transferred - Fair Value	Per kl	This tariff relates to the transfer of raw water generated by the Water & Sanitation Department from own sources as part of the water inventory system.	0.945		n	0.945		0.00%
8.2		WATER RECLAMATION - BULK TARIFF		The tariff relates to the selling of water reclaimed from the Wastewater Treatment Plants and used by the Bulk Water branch.	8.25		n	9.24		12.00%
B		NON POTABLE WATER:								
9		SPRING WATER :								
9.1		Infrastructure provided by Council:								
9.1.1	FCR	Commercial / Industrial users/Domestic	Per kl		8.16	9.38	y	8.71	10.02	6.80%
9.1.2	FCR	Schools	Per kl	Schools	7.13	8.20	y	7.62	8.76	6.80%
9.1.3	FCR	Departmental	Per kl	Departmental	7.13		n	7.62		6.80%
9.1.4	FCR	Golf Clubs	Per kl	Golf Clubs	7.13	8.20	y	7.62	8.76	6.80%
9.2		Infrastructure provided by User:								
9.2.1	FCR	Irrigation	Per kl	Agricultural irrigation schemes & Bulk Supply (min 5 Mega litre/day)	2.80	3.22	y	2.99	3.44	6.80%
9.2.2	FCR	Commercial / Industrial users/Domestic	Per kl		2.80	3.22	y	2.99	3.44	6.80%
9.2.3	FCR	Schools	Per kl	Schools	2.80	3.22	y	2.99	3.44	6.80%
9.2.4	FCR	Departmental	Per kl	Departmental	2.80		n	2.99		6.80%
9.2.5	FCR	Golf Clubs	Per kl	Golf Clubs	2.80	3.22	y	2.99	3.44	6.80%

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
10		TREATED EFFLUENT WATER :								
10.1		Infrastructure provided by Council:								
10.1.1	FCR	Commercial / Industrial users/Domestic	Per kl		8.16	9.38	y	8.71	10.02	6.80%
10.1.2	FCR	Schools	Per kl	Schools	7.13	8.20	y	7.62	8.76	6.80%
10.1.3	FCR	Departmental	Per kl	Departmental	7.13		n	7.62		6.80%
10.1.4	FCR	Golf Clubs	Per kl	Golf Clubs	7.13	8.20	y	7.62	8.76	6.80%
10.2		Infrastructure provided by User:								
10.2.1	FCR	Irrigation	Per kl	Agricultural irrigation schemes & Bulk Supply (min 5 Mega litre/ day)	2.80	3.22	y	2.99	3.44	6.80%
10.2.2	FCR	Commercial / Industrial users/Domestic	Per kl		2.80	3.22	y	2.99	3.44	6.80%
10.2.3	FCR	Schools	Per kl	Schools	2.80	3.22	y	2.99	3.44	6.80%
10.2.4	FCR	Departmental	Per kl	Departmental	2.80		n	2.99		6.80%
10.2.5	FCR	Golf Clubs	Per kl	Golf Clubs	2.80	3.22	y	2.99	3.44	6.80%
10.3		Current Agreements:								
10.3.1		Special Users	Per kl	As per Agreement with Director: Commercial Water & Sanitation	As per agreement	As per agreement	y	As per agreement	As per agreement	
11		ALL WATER - FIXED BASIC:								
11.1		All categories (excluding Indigent Properties, Charities, Old Age Homes, Homeless people shelters / Homes catering for the health of physically or mentally challenged individuals/Homes for Children)								

WATER & SANITATION SERVICES - WATER CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					R	R	Yes/No	R	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
		15mm	Per meter Per month		71.07	81.73	y	75.90	87.29	6.80%
		20mm	Per meter Per month		126.91	145.94	y	135.54	155.87	6.80%
		25mm	Per meter Per month		197.97	227.67	y	211.44	243.15	6.80%
		40mm	Per meter Per month		507.63	583.77	y	542.15	623.47	6.80%
		50mm	Per meter Per month		793.17	912.14	y	847.10	974.17	6.80%
		80mm	Per meter Per month		2 030.51	2 335.09	y	2 168.58	2 493.87	6.80%
		100mm	Per meter Per month		3 172.67	3 648.57	y	3 388.41	3 896.67	6.80%
		150mm	Per meter Per month		7 138.51	8 209.29	y	7 623.93	8 767.52	6.80%
		200mm	Per meter Per month		12 690.68	14 594.29	y	13 553.65	15 586.70	6.80%
		250mm	Per meter Per month		19 803.81	22 774.38	y	21 150.47	24 323.04	6.80%
		300mm and Above	Per meter Per month		28 554.04	32 837.14	y	30 495.71	35 070.07	6.80%
11.2		Indigent Properties (including Charities, Old Age Homes, Homeless people shelters / Homes catering for the health of physically or mentally challenged individuals/Homes for Children)								
		15mm	Per meter Per month		0.00	0.00	y	0.00	0.00	0.00%
		20mm	Per meter Per month		0.00	0.00	y	0.00	0.00	0.00%
		25mm	Per meter Per month		0.00	0.00	y	0.00	0.00	0.00%
		40mm	Per meter Per month		0.00	0.00	y	0.00	0.00	0.00%

WATER & SANITATION SERVICES - SANITATION CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 R excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 R excl. VAT	2024/25 R incl. VAT	% Increase / Decrease
		SANITATION CONSUMPTION:								
1.1		DOMESTIC Full - Non Indigent		Single residential properties - 70% of water consumption to a maximum of 35 kl of sewerage per month (70% of 50 kl water = 35 kl of sewerage)						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		16.12	18.53	y	17.21	19.80	6.80%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		22.15	25.47	y	23.65	27.20	6.80%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		31.10	35.77	y	33.22	38.20	6.80%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		48.92	56.26	y	52.25	60.09	6.80%
1.2		DOMESTIC Full - Indigent		Single residential properties - 70% of water consumption to a maximum of 35 kl of sewerage per month (70% of 50 kl water = 35 kl of sewerage). Also refer to the Credit Control and Debt Collection Policy as well as Tariff Policy.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
1.3		DOMESTIC Cluster - Non Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. 90% of water consumption (* see note) up to a maximum of 35kl per household. An allowance to apply the tariff structure per unit per month upon submission of a signed affidavit stating the number of units/refer tariff policy.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		16.12	18.53	y	17.21	19.80	6.80%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		22.15	25.47	y	23.65	27.20	6.80%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		31.10	35.77	y	33.22	38.20	6.80%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		48.92	56.26	y	52.25	60.09	6.80%
1.4		Domestic Cluster - Social Housing Institutions - City Partners		Cluster Development Properties registered in the name of a SHRA-accredited Social Housing Institution and, registered as City Partners – Full and Conditional						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		22.15	25.47	y	23.65	27.20	6.80%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		31.10	35.77	y	33.22	38.20	6.80%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		48.92	56.26	y	52.25	60.09	6.80%
1.5		DOMESTIC Cluster - Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. 90% of water consumption (* see note) up to a maximum of 35kl per household. An allowance of 10.5kl per unit per month at zero cost upon submission of a signed affidavit stating the number of units/refer tariff policy. Categorisation will be subject to the approval of Indigency of the Full Development.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%

WATER & SANITATION SERVICES - SANITATION CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 R	2023/24 R	VAT Yes/No	2024/25 R	2024/25 R	% Increase / Decrease
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
		Step 4 (>24.5 ≤ 35 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
1.6		DOMESTIC Backyard Dwellers		Single separate meter device to backyard occupants. An allowance of 7.35 kl per structure per month at zero cost for registered backyard unit (signed affidavit stating occupants and the number of units will be required) after single separate meter device has been installed. (Not currently active)						
	S	Step 1 (0 ≤ 4.2 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00	0.00	y	0.00	0.00	0.00%
2.1		COMMERCIAL	Per kl	95% of water consumption. (* See Note.)	29.51	33.93	y	31.51	36.24	6.80%
2.2		INDUSTRIAL	Per kl	95% of water consumption. (* See Note.)	29.51	33.93	y	31.51	36.24	6.80%
3		OTHER								
3.1		Government	Per kl	National/Provincial - 95% of water consumption. (* See Note.)	29.51	33.93	y	31.51	36.24	6.80%
3.2	FCR	Schools/Educational Institutions/Sporting Bodies/Religious Institutions	Per kl	95% of water consumption. (* See Note.)	29.51	33.93	y	31.51	36.24	6.80%
3.3		Miscellaneous	Per kl	All consumers not in other categories - 95% of water consumption. (* See Note.)	29.51	33.93	y	31.51	36.24	6.80%
3.4		Charities / PBO / NPO		Charities / PBO / NPO (including NPO's for animal shelters / early childhood development / youth development / local community museum facilities.	23.84	27.41	y	25.46	29.28	6.80%
3.5		ACCOMODATION FOR THE VULNERABLE								
3.5.1		Homeless people shelters / Homes catering for the health of physically or mentally challenged individuals / Homes for Children		Homeless People shelters / homes catering for the health of physically or mentally challenged individuals, children's homes and which has applied for and been registered as such shelter by the relevant Council Committee/Body. A sworn affidavit must accompany the application indicating the number of people normally accommodated at the facility.						
	FCR	Step 1 (0 ≤ 0.525 kl per person)	Per kl per person		0.00	0.00	y	0.00	0.00	0.00%
	FCR	Step 2 (>0.525 kl per person)	Per kl per person		23.84	27.41	y	25.46	29.28	6.80%
3.5.2		Old Aged Homes as defined		Registered old aged homes as defined. A sworn affidavit must accompany the application indicating the number of people normally accommodated at the facility.						
	FCR	Step 1 (0 ≤ 0.525 kl per person)	Per kl per person		0.00	0.00	y	0.00	0.00	0.00%

WATER & SANITATION SERVICES - SANITATION CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 R excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 R excl. VAT	2024/25 R incl. VAT	% Increase / Decrease
	FCR	Step 2 (>0.525 kl per person)	Per kl per person		23.84	27.41	y	25.46	29.28	6.80%
	4	DEPARTMENTAL								
	4.1	FCR Municipal	Per kl	95% of water (*See Note) consumption excluding facilities not connected to the sewer system .	29.51		n	31.51		6.80%
	4.2	Full - Non Indigent		Single residential properties - 70% of water consumption to a maximum of 35 kl of sewerage per month (70% of 50 kl water = 35 kl of sewerage)						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		16.12		n	17.21		6.80%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		22.15		n	23.65		6.80%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		31.10		n	33.22		6.80%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		48.92		n	52.25		6.80%
	4.3	Full - Indigent		Single residential properties - 70% of water consumption to a maximum of 35 kl of sewerage per month (70% of 50 kl water = 35 kl of sewerage). Also refer to the Credit Control and Debt Collection Policy as well as Tariff Policy.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00		n	0.00		0.00%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		0.00		n	0.00		0.00%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		0.00		n	0.00		0.00%
	4.4	Cluster - Non Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. 90% of water consumption (* see note) up to a maximum of 35kl per household. An allowance to apply the tariff structure per unit per month upon submission of a signed affidavit stating the number of units/refer tariff policy.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		16.12		n	17.21		6.80%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		22.15		n	23.65		6.80%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		31.10		n	33.22		6.80%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		48.92		n	52.25		6.80%
	4.5	Cluster - Indigent		Sectional Title, Single Title cluster developments, Gated Villages, Block of Flats with unregistered individual ownership of units. (* see note) up to a maximum of 35kl per household. An allowance of 10.5kl per unit per month at zero cost upon submission of a signed affidavit stating the number of units/refer tariff policy. Categorisation will be subject to the approval of Indigency of the Full Development.						
	S	Step 1 (0 ≤ 4,2 kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00		n	0.00		0.00%
		Step 3 (>7.35 ≤ 24.5 kl)	Per kl		0.00		n	0.00		0.00%
		Step 4 (>24.5 ≤ 35 kl)	Per kl		0.00		n	0.00		0.00%

WATER & SANITATION SERVICES - SANITATION CONSUMPTIVE TARIFFS: LEVEL WATER WISE (NO RESTRICTION)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 R excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 R excl. VAT	2024/25 R incl. VAT	% Increase / Decrease
4.6		Backyard Dwellers		Single separate meter device to backyard occupants. An allowance of 7.35kl per structure per month at zero cost for registered backyard unit (signed affidavit stating occupants and the number of units will be required) after single separate meter device has been installed. (Currently active)						
	S	Step 1 (0 ≤ 4.2 kl)	Per kl		0.00		n	0.00		0.00%
	S	Step 2 (>4.2 ≤ 7.35 kl)	Per kl		0.00		n	0.00		0.00%
5		WASTEWATER:								
5.1		Wastewater Treatment	Per kl	Only for cost recovery for Bulk Wastewater treatment for Sewer Services Reticulation of the City of Cape Town.	8.25		n	9.24		12.00%
		* IMPORTANT NOTE:								
		Director: Commercial Water and Sanitation Services may adjust the percentages as appropriate to the consumer. This is not applicable to the Domestic Full category.								
6		SEWERAGE - FIXED BASIC : (Applicable to customers utilising alternative sources of water as primary resource)		The deemed amount of kilolitres will be multiplied by the applicable tariff category of the property.	KILOLITER			KILOLITER		
6.1		Categories (excluding Indigent Properties)								
		Domestic Full			9.00		y	9.00		
		Domestic Cluster	Per Unit		9.00		y	9.00		
		Domestic Cluster - Social Housing Institutions - City Partners	Per Unit		9.00		y	9.00		
		Commercial (performing business from single house premises)			9.00		y	9.00		
		Commercial (performing business from larger business premises)			Determined by Water Audit		y	Determined by Water Audit		
		Industrial			Determined by Water Audit		y	Determined by Water Audit		
		Government			Determined by Water Audit		y	Determined by Water Audit		
		Schools			Determined by Water Audit		y	Determined by Water Audit		
		Sport Bodies			Determined by Water Audit		y	Determined by Water Audit		
		Religious Institutions			Determined by Water Audit		y	Determined by Water Audit		
		Charities			Determined by Water Audit		y	Determined by Water Audit		
		Miscellaneous			Determined by Water Audit		y	Determined by Water Audit		
		Water Services Intermediaries			Determined by Water Audit		y	Determined by Water Audit		

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
		MISCELLANEOUS TARIFFS								
1		AVAILABILITY CHARGES (Vacant Erven):		Not applicable to land owned or leased from Council and not applicable if no Council potable water service is within 30m of affected property's boundary to Council land.						
1.1		Vacant erven excluding unproductive vacant land / where the connection to developed land is removed.(Eg Public open space, Private road, etc).	Per Month		96.96	111.50	y	102.70	118.10	5.92%
2	FCR	DELIVERY OF BULK POTABLE WATER VIA TANKER (Ad Hoc Service only. Subject to approval of Director: Commercial (Water & Sanitation))		To formal households not connected to the City of Cape Town reticulation system / specific cases approved by the Director: Commercial (Water & Sanitation). At full cost recovery. Service subject to the availability of Tankers. No Free kl. Water drawn from Recticulation Infrastructure.	(Applicable Miscellaneous Tariff x kl sold) + Transport Cost + Labour Cost	(Applicable Miscellaneous Tariff x kl sold) + Transport Cost + Labour Cost	y	(Applicable Miscellaneous Tariff x kl sold) + Transport Cost + Labour Cost	(Applicable Miscellaneous Tariff x kl sold) + Transport Cost + Labour Cost	
3		CONSUMER - DEPOSIT:								
3.1		New Accounts (No VAT)	Refundable Deposit	For non-domestic customers only.	987.91		n	1 046.20		5.90%
4		TEMPORARY CONNECTION:								
4.1		TEMPORARY CONNECTION: DEPOSIT	Refundable Deposit	For use with temporary connections installed for development & construction purposes. Also refer 4.2	9 388.47		n	9 942.39		5.90%
4.2		TEMPORARY METERS		For use with temporary connections installed for development & construction purposes. Apply Standard "new connection" Tariff. Also refer 4.1.						
4.3		HYDRANT STANDPIPES (Potable and Non Potable)								
4.3.1		All Sizes	Refundable Deposit		23 475.09		n	24 860.12		5.90%
4.3.2		15mm -50mm	Rental/month or pro rata month		838.87	964.70	y	888.35	1 021.60	5.90%
4.3.3		Repairs on Standpipes		Cost plus admin fees. Offset against deposit for any damage sustained.						

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
				In instances where a hydrant standpipe is not returned or cannot be presented for reading purposes by the applicant / user to the City of Cape Town, the City will continue to charge the monthly rental charge as well as an estimate of water consumed based on the standard flow rate (refer tariff policy). Where Pre-Paid Hydrants are available, users will be expected to make payment upfront for the consumption of water.						
5		NEW CONNECTIONS								
5.1		PERMANENT WATER CONNECTIONS COMPLETE - (Installed by Council)		Please note instances of new connections and temporary connections. In case of temporary connections for construction / development purposes also include temporary connection deposits						
5.1.1	FCR	New Government Low Cost Housing Development / Projects: Complete device, meter and box supplied and installed by Council.	per connection	No installation by private contractor allowed.	1 305.04	1 500.80	y	1 382.00	1 589.30	5.90%
5.2		PERMANENT WATER CONNECTIONS -COMPLETE 50mm and below (Installed by Council)		Please note instances of new connections and temporary connections. In case of temporary connections for construction / development purposes also include temporary connection deposits						
5.2.1	FCR	15mm complete (stop cock+ meter box+ conventional meter)	per connection		2 971.39	3 417.10	y	3 146.70	3 618.70	5.90%
5.2.2	FCR	20mm complete (stop cock+ meter box+ conventional meter)	per connection		3 412.43	3 924.30	y	3 613.74	4 155.80	5.90%
5.2.3	FCR	25mm complete (stop cock+meter box+ meter)	per connection		8 808.96	10 130.30	y	9 328.70	10 728.00	5.90%
5.2.4	FCR	40mm complete (stop cock+meter box+ meter)	per connection		12 101.57	13 916.80	y	12 815.57	14 737.90	5.90%
5.2.5	FCR	50 mm complete (stop cock+meter box+ meter)	per connection		22 818.70	26 241.50	y	24 164.96	27 789.70	5.90%
5.3		PERMANENT WATER CONNECTIONS - COMPLETE Above 50mm above (Installed by Council)								
5.3.1	FCR	80mm complete (chamber + fittings + meter)	per connection		73 042.17	83 998.50	y	77 351.65	88 954.40	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
5.3.2	FCR	100mm complete (chamber + fittings + meter)	per connection		88 554.96	101 838.20	y	93 779.74	107 846.70	5.90%
5.3.3	FCR	150mm complete (chamber + fittings + meter)	per connection		131 547.39	151 279.50	y	139 308.70	160 205.00	5.90%
5.3.4	FCR	>150mm	per connection		Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
5.4		PERMANENT WATER CONNECTIONS - METER ONLY (Installed by Council) only on formal approval by the Director: Commercial (Water & Sanitation)								
5.4.1	FCR	80mm	per connection	Chamber and fittings previously completed by Developer / Contractor	18 703.83	21 509.40	y	19 807.39	22 778.50	5.90%
5.4.2	FCR	100mm	per connection	Chamber and fittings previously completed by Developer / Contractor	20 346.78	23 398.80	y	21 547.22	24 779.30	5.90%
5.4.3	FCR	150mm	per connection	Chamber and fittings previously completed by Developer / Contractor	34 893.83	40 127.90	y	36 952.52	42 495.40	5.90%
5.4.4	FCR	>150mm	per connection	Chamber and fittings previously completed by Developer / Contractor	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
5.5		PERMANENT WATER CONNECTIONS - METER ONLY (Meter supplied by Council /chamber and fittings and installation by developer supervised by Council) only on formal approval by the Director: Commercial (Water & Sanitation)								
5.5.1	FCR	80mm	per connection	Chamber and fittings and meter installation completed by Developer / Contractor	R7 407.90 + Supervision Fee R4 412.00	R8 519.10 + Supervision Fee R5 073.80	y	R7 844.96 + Supervision Fee R4 672.35	R9 021.70 + Supervision Fee R5 373.20	5.90%
5.5.2	FCR	100mm	per connection	Chamber and fittings and meter installation completed by Developer / Contractor	R11 574.87 + Supervision Fee R4 412.00	R13 311.10 + Supervision Fee R5 073.80	y	R12 257.83 + Supervision Fee R4 672.35	R14 096.50 + Supervision Fee R5 373.20	5.90%
5.5.3	FCR	150mm	per connection	Chamber and fittings and meter installation completed by Developer / Contractor	R18 519.74 + Supervision Fee R4 412.00	R21 297.70 + Supervision Fee R5 073.80	y	R19 612.43 + Supervision Fee R4 672.35	R22 554.30 + Supervision Fee R5 373.20	5.90%
5.5.4	FCR	>150mm	per connection	Chamber and fittings and meter installation completed by Developer / Contractor	Cost + Supervision Fee R4 412.00	Cost + Supervision Fee R5 073.80	y	Cost + Supervision Fee R4 672.35	Cost + Supervision Fee R5 373.20	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
5.6		TREATED EFFLUENT CONNECTIONS								
5.6.1		50mm complete (chamber + fittings + meter)	per connection		78 410.52	90 172.10	y	83 036.78	95 492.30	5.90%
5.6.2		80mm complete (chamber + fittings + meter)	per connection		87 717.65	100 875.30	y	92 892.96	106 826.90	5.90%
5.6.3		100mm complete (chamber + fittings + meter)	per connection		104 562.87	120 247.30	y	110 732.09	127 341.90	5.90%
5.6.4		150mm complete (chamber + fittings + meter)	per connection		130 789.04	150 407.40	y	138 505.57	159 281.40	5.90%
6		REPLACEMENT OF WATER METERS								
6.1		REPLACEMENT - VOLUNTARY		Applies to voluntary water management device paid installations, installations stipulated by the Tariff Policy.						
6.1.1	FCR	Resizing of Metered Connection	per connection	Application to be made by owner. Installation to be performed by Council. Approval of Resizing to be performed by Council. Cost to include connection to the main, leading, meter with chamber and / or removal of meter (where applicable)	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
6.1.2	FCR	Removal of Redundant Metered Connection	per connection	Application to be made by owner. Work to be performed by Council. Apporoval of redundant meter to be performed by Council.	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
6.2		REPLACEMENT - DAMAGED		Applies to repair / replacement of meters damaged by the consumers. In situations where the Customer is deemed to be careless in device protection (e.g. building work, use of lawnmower etc.).						
6.2.1	FCR	New Government Low Cost Housing Development / Projects: Complete device, meter and box supplied and installed by Council.	per connection	No installation by private contractor allowed.	1 305.04	1 500.80	y	1 382.00	1 589.30	5.90%
6.2.2	FCR	15mm complete (stop cock+ meter box+ conventional meter)	per connection		2 971.39	3 417.10	y	3 146.70	3 618.70	5.90%
6.2.3	FCR	20mm complete (stop cock+ meter box+ conventional meter)	per connection		3 412.43	3 924.30	y	3 613.74	4 155.80	5.90%
6.2.4	FCR	25mm complete (stop cock+meter box+ meter)	per connection		8 808.96	10 130.30	y	9 328.70	10 728.00	5.90%
6.2.5	FCR	40mm complete (stop cock+meter box+ meter)	per connection		12 101.57	13 916.80	y	12 815.57	14 737.90	5.90%
6.2.6	FCR	50 mm complete (stop cock+meter box+ meter)	per connection	New connection processor to check with the Depot/Projects regarding the availability and appropriateness of pre-fabricated meter unit	22 818.70	26 241.50	y	24 164.96	27 789.70	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
6.2.7	FCR	>50mm	per connection		Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
7		MOVING OF METERS								
7.1	FCR	15mm - 25mm (Moving meter with/without box to outside) up to 3m requested by consumer/owner	per connection	Applicable to connections where the shift is not beneficial to Council (e.g. new connection and accessible) This applies where the Customer requires the alteration/shift due to building work, paving etc. All user categories are included, e.g. 25mm commercial connection. No charge will be applicable to inline movement for Domestic customers to address accessibility after all internal processes / procedures have been adhered to.	2 811.30	3 233.00	y	2 977.13	3 423.70	5.90%
7.2	FCR	Moving of 15mm-25mm meters more than 3m / moving of all other meters exceeding 25mm / replacing meters exceeding 32mm.	per connection		Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
8		METER TESTING -								
8.1		Removal, testing and replacement - Domestic Full and Domestic Cluster Only								
8.1.1		Application by Domestic Indigent Customer	per meter	The full prescribed testing tariff (see above) can be applied retrospectively for indigent customers on condition that a proportional payment is made upfront.	96.78	111.30	y	102.52	117.90	5.93%
8.1.2	FCR	15mm - Meter Age 0 to 5 years	per meter		1 724.09	1 982.70	y	1 825.83	2 099.70	5.90%
8.1.3	FCR	15mm - Meter Age over 5 years to 10 years	per meter		1 293.04	1 487.00	y	1 369.30	1 574.70	5.90%
8.1.4	FCR	15mm - Meter Age over 10 years to 15 years	per meter		862.09	991.40	y	912.96	1 049.90	5.90%
8.1.5	FCR	15mm - Meter Age over 15 years	per meter		431.04	495.70	y	456.43	524.90	5.89%
8.1.6	FCR	20mm - Meter Age 0 to 5 years	per meter		1 906.00	2 191.90	y	2 018.43	2 321.20	5.90%
8.1.7	FCR	20mm - Meter Age over 5 years to 10 years	per meter		1 429.48	1 643.90	y	1 513.83	1 740.90	5.90%
8.1.8	FCR	20mm - Meter Age over 10 years to 15 years	per meter		953.04	1 096.00	y	1 009.30	1 160.70	5.90%
8.1.9	FCR	20mm - Meter Age over 15 years	per meter		476.52	548.00	y	504.61	580.30	5.89%
8.1.10	FCR	25mm - Meter Age 0 to 5 years	per meter		2 608.96	3 000.30	y	2 762.87	3 177.30	5.90%
8.1.11	FCR	25mm - Meter Age over 5 years to 10 years	per meter		1 956.78	2 250.30	y	2 072.26	2 383.10	5.90%
8.1.12	FCR	25mm - Meter Age over 10 years to 15 years	per meter		1 304.52	1 500.20	y	1 381.48	1 588.70	5.90%
8.1.13	FCR	25mm - Meter Age over 15 years	per meter		652.35	750.20	y	690.87	794.50	5.91%
8.1.14	FCR	32mm - Meter Age 0 to 5 years	per meter		3 661.57	4 210.80	y	3 877.57	4 459.20	5.90%
8.1.15	FCR	32mm - Meter Age over 5 years to 10 years	per meter		2 929.22	3 368.60	y	3 102.00	3 567.30	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
8.1.16	FCR	32mm - Meter Age over 10 years to 15 years	per meter		2 196.96	2 526.50	y	2 326.61	2 675.60	5.90%
8.1.17	FCR	32mm - Meter Age over 15 years	per meter		1 464.61	1 684.30	y	1 551.04	1 783.70	5.90%
8.1.18	FCR	40mm - Meter Age 0 to 5 years	per meter		4 337.39	4 988.00	y	4 593.30	5 282.30	5.90%
8.1.19	FCR	40mm - Meter Age over 5 years to 10 years	per meter		3 469.74	3 990.20	y	3 674.43	4 225.60	5.90%
8.1.20	FCR	40mm - Meter Age over 10 years to 15 years	per meter		2 602.52	2 992.90	y	2 756.09	3 169.50	5.90%
8.1.21	FCR	40mm - Meter Age over 15 years	per meter		1 734.96	1 995.20	y	1 837.30	2 112.90	5.90%
8.1.22	FCR	50mm - Meter Age 0 to 5 years	per meter		7 805.48	8 976.30	y	8 266.00	9 505.90	5.90%
8.1.23	FCR	50mm - Meter Age over 5 years to 10 years	per meter		6 244.35	7 181.00	y	6 612.78	7 604.70	5.90%
8.1.24	FCR	50mm - Meter Age over 10 years to 15 years	per meter		4 683.30	5 385.80	y	4 959.65	5 703.60	5.90%
8.1.25	FCR	50mm - Meter Age over 15 years	per meter		3 122.35	3 590.70	y	3 306.61	3 802.60	5.90%
8.1.26	FCR	80mm - Meter Age 0 to 5 years	per meter		10 027.48	11 531.60	y	10 619.13	12 212.00	5.90%
8.1.27	FCR	80mm - Meter Age over 5 years to 10 years	per meter		8 022.00	9 225.30	y	8 495.30	9 769.60	5.90%
8.1.28	FCR	80mm - Meter Age over 10 years to 15 years	per meter		6 016.52	6 919.00	y	6 371.48	7 327.20	5.90%
8.1.29	FCR	80mm - Meter Age over 15 years	per meter		4 011.04	4 612.70	y	4 247.65	4 884.80	5.90%
8.1.30	FCR	100mm - Meter Age 0 to 5 years	per meter		11 790.61	13 559.20	y	12 486.26	14 359.20	5.90%
8.1.31	FCR	100mm - Meter Age over 5 years to 10 years	per meter		9 432.35	10 847.20	y	9 988.87	11 487.20	5.90%
8.1.32	FCR	100mm - Meter Age over 10 years to 15 years	per meter		7 074.43	8 135.60	y	7 491.83	8 615.60	5.90%
8.1.33	FCR	100mm - Meter Age over 15 years	per meter		4 716.26	5 423.70	y	4 994.52	5 743.70	5.90%
8.1.34	FCR	150mm - Meter Age 0 to 5 years	per meter		17 830.17	20 504.70	y	18 882.17	21 714.50	5.90%
8.1.35	FCR	150mm - Meter Age over 5 years to 10 years	per meter		14 264.09	16 403.70	y	15 105.65	17 371.50	5.90%
8.1.36	FCR	150mm - Meter Age over 10 years to 15 years	per meter		10 698.26	12 303.00	y	11 329.48	13 028.90	5.90%
8.1.37	FCR	150mm - Meter Age over 15 years	per meter		7 132.09	8 201.90	y	7 552.87	8 685.80	5.90%
8.2		Removal, testing and replacement - Non-Domestic		Applies where test is requested by consumer, to be applied as a deposit to be refunded only if meter fails test.						
8.2.1	FCR	15mm	per meter		1 724.09	1 982.70	y	1 825.83	2 099.70	5.90%
8.2.2	FCR	20mm	per meter		1 906.00	2 191.90	y	2 018.43	2 321.20	5.90%
8.2.3	FCR	25mm	per meter		2 608.96	3 000.30	y	2 762.87	3 177.30	5.90%
8.2.4	FCR	32mm	per meter		3 661.57	4 210.80	y	3 877.57	4 459.20	5.90%
8.2.5	FCR	40mm	per meter		4 337.39	4 988.00	y	4 593.30	5 282.30	5.90%
8.2.6	FCR	50mm	per meter		7 805.48	8 976.30	y	8 266.00	9 505.90	5.90%
8.2.7	FCR	80mm	per meter		10 027.48	11 531.60	y	10 619.13	12 212.00	5.90%
8.2.8	FCR	100mm	per meter		11 790.61	13 559.20	y	12 486.26	14 359.20	5.90%
8.2.9	FCR	150mm	per meter		17 830.17	20 504.70	y	18 882.17	21 714.50	5.90%
8.2.10	FCR	200mm	per meter		20 356.96	23 410.50	y	21 558.00	24 791.70	5.90%
8.2.11	FCR	300mm+	per meter	The tariff for 400-600mm has been incorporated into this item for all sizes 300mm and greater.	49 648.70	57 096.00	y	52 578.00	60 464.70	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
8.3		Testing of Meter Only		Applies to testing of meters for private entities. Meter to be delivered to Council's testing facility.						
8.3.1	FCR	15 mm - 20 mm	per meter		173.39	199.40	y	183.65	211.20	5.92%
8.3.2	FCR	25mm	per meter		203.57	234.10	y	215.57	247.90	5.89%
8.3.3	FCR	32mm	per meter		583.39	670.90	y	617.83	710.50	5.90%
8.3.4	FCR	40mm-50mm	per meter	Different sizes combined into one tariff	965.91	1 110.80	y	1 022.87	1 176.30	5.90%
8.3.5	FCR	100mm-150mm	per meter	Different sizes combined into one tariff	1 288.00	1 481.20	y	1 364.00	1 568.60	5.90%
8.3.6	FCR	200mm-300mm	per meter	Different sizes combined into one tariff	1 846.78	2 123.80	y	1 955.74	2 249.10	5.90%
8.3.7	FCR	400mm-600mm	per meter		2 246.61	2 583.60	y	2 379.13	2 736.00	5.90%
9		OTHER:								
		GENERAL / DEVELOPMENT / INSPECTION TARIFFS								
9.1	FCR	Special Reading	per reading	At owner's request.	246.87	283.90	y	261.48	300.70	5.92%
9.2	FCR	Shut off / turn on for repairs (per trip/call out)	per call out	At owner's request to allow internal plumbing repairs. Owner to locate own private stopcock to shut down the supply, or tariff will apply in instances where a team needs to be sent out to assist.	438.87	504.70	y	464.78	534.50	5.90%
9.3.1	FCR	Call-out rate : Miscellaneous and Water Inspectors - Office hours (per call out)	per call out	Tariff to cater for development inspections, pressure tests, special requests to inspect private property for high consumptions / potential leaks, approval of new installations etc. Mainly applies to technical, inspectorate investigation / approvals (where non-indigent customers request call outs). Incorporates Water Inspectorate call out tariffs.	714.70	821.90	y	756.87	870.40	5.90%
9.3.2	FCR	Call-out rate : Miscellaneous and Water Inspectors - After hours (Office hours X 2)	per call out	As above.	1 429.39	1 643.80	y	1 513.74	1 740.80	5.90%
9.4.1	FCR	Non Payment disconnection fee	per disconnection		430.52	495.10	y	455.91	524.30	5.90%
9.4.2	FCR	Non Payment reconnection fee	per reconnection		349.30	401.70	y	369.91	425.40	5.90%
9.5	FCR	Clearing/ replacement of water meters (Where owner is responsible for keeping the meter clear) (per call out)	per call out	Refer to bylaws Chapter 33 (5) (b&c). Revenue (W&S) to first issue a notification in terms of the bylaw to the Customer to clear the meter. Failure to act will result in this tariff being applied	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
9.6	FCR	Mains Pressure / Flow Test (Council main pressure and fire flow test)	per test		2 083.39	2 395.90	y	2 206.35	2 537.30	5.90%
9.7.1	FCR	Final Connections to Council Mains (Excl new meter connections)	per connection		Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
9.7.2	FCR	Installation of communication pipe (leading)	per connection	Application to be made by owner / developer. Installation to be performed by owner (or his / her representative), developer or Council. Cost to include connection to the main and leading (meter and chamber excluded). Also applicable to sub-divisions.	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
9.8	FCR	Damage to Council Mains and Meters (plus water calculated by Administration)		Actual cost of repairs plus admin charges. Includes reckless damage to larger diameter meters and associated fittings by Customers/ Contractors	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
9.9	FCR	Tampering (Plus water theft calculated by Administration)		Relevant meter related tariff, plus cost of water calculated as stolen plus R5 000 tampering surcharge	Relevant meter fee plus cost of water stolen plus R5 000 tampering surcharge	Relevant meter fee plus cost of water stolen plus R5 000 tampering surcharge	y	Relevant meter fee plus cost of water stolen plus R5 000 tampering surcharge	Relevant meter fee plus cost of water stolen plus R5 000 tampering surcharge	
9.10.1	FCR	Large meter test rig (Hire)	hire per hour	Applies to non Municipal bodies by arrangement.	1 052.61	1 210.50	y	1 114.70	1 281.90	5.90%
9.10.2	FCR	Small meter test rig (Hire)	hire per hour	Applies to non Municipal bodies by arrangement.	655.48	753.80	y	694.17	798.30	5.90%
9.11	FCR	Data information requests	Per event and up to 3 copies or electronic documents	Includes way leave approvals, GIS print outs, copies of plans	142.87	164.30	y	151.30	174.00	5.90%
9.12	FCR	Replacement of lost standpipe tags	per tag	Application at nearest municipal office to be accompanied by identity document and affidavit (at police station) stating that tag is lost.	86.61	99.60	y	91.74	105.50	5.92%
9.13	FCR	>50mm Supervision of connection. All work performed by Developer / Contractor of Developer to Council's specification	per connection	All work performed by approved Developer / Contractor to Council's specification. Excludes connection to Council's main.	4 412.00	5 073.80	y	4 672.35	5 373.20	5.90%
9.14		Control and regulatory monitoring of privately-owned water treatment plants	per month/inspection	A recovery charge for costs incurred by Council for the control and regulatory monitoring of operation of privately-owned water treatment plants	1 416.61	1 629.10	y	1 500.17	1 725.20	5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
9.15		Annual audit of privately-owned water treatment plants	per audit	A recovery charge for costs incurred by Council for the annual auditing of operation of privately-owned water treatment plants	3 539.91	4 070.90	y	3 748.78	4 311.10	5.90%
9.16		Full analysis : annual audit of privately-owned water treatment plants		Annual full analysis in terms SANS 241:2015 or as amended to include microbial determinands and physical,aesthetic,operational and chemical determinands.	Full Cost	Full Cost	y	Full Cost	Full Cost	
10		VISITATION AT CUSTOMERS PREMISES								
10.1		Visitation Fee - To deliver a notice of impending disconnection of supply for non-payment of account	Per Visit		162.78	187.20	y	165.04	189.80	1.39%
11		WORKS AT CUSTOMERS PREMISES								
11.1	FCR	Works at customers premises per specific request	Per Visit / call out		Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
12		IDENTIFICATION & PROTECTION OF UNDERGROUND SERVICES (Water and Sanitation)								
12.1	FCR	Wayleave Application: Administrative Cost Inclusive of site visits up to (not exceeding) a distance of one kilometre. Non refundable.Deposit may be waived at the discretion of the Director: Commercial Water & Sanitation			3 493.57	4 017.60	y	N/A	N/A	
12.2	FCR	Additional site visits required	Per Visit		709.57	816.00	y	751.39	864.10	5.89%
12.3	FCR	Guarantees against potential damages as specified in the Debt Collection Policy / Refundable Security / bank guaranteed cheque deposit to be paid by applicants / contractors / consultants prior to undertaking any work near Water and Sanitation Services Infrastructure (Wayleave Application).Deposit may be waived at the discretion of the Director: Commercial Water & Sanitation	Deposit	Deposits (or any part thereof) may be retained to recover any cost incurred for any repairs to damaged Water and Sanitation infrastructure.						
12.3.1	FCR	40mm - <160mm			15 558.71		n	16 476.67		5.90%

WATER & SANITATION SERVICES - WATER - MISCELLANEOUS										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
12.3.2	FCR	160mm - <300mm			38 894.16		n	41 188.91		5.90%
12.3.3	FCR	300mm - <700mm			93 347.02		n	98 854.50		5.90%
12.3.4	FCR	700mm - <1500mm			155 576.63		n	164 755.65		5.90%
12.4	FCR	Repairs to damaged Water and Sanitation Infrastructure	Final cost	Deposits (or any part thereof) may be retained to recover any cost incurred for any repairs to damaged Water and Sanitation infrastructure.	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
13		MASTER PLANNING								
13.1	FCR	Provision of Master Planning capacity analysis and information on available infrastructure - Water and Sanitation	Final cost	Provision of information on available infrastructure capacity for potential developments.Final charge will be based on actual cost of hours worked plus printing/reproduction costs plus admin charge.	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
14		CONTROL ROOM SERVICE								
14.1	FCR	Control Room Service	Per service per month	Service transferred from Corporate Services (Customers i.e. Table Mountain National Park)	25 334.09	29 134.20	y	26 828.78	30 853.10	5.90%

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
		MISCELLANEOUS TARIFFS								
1		AVAILABILITY CHARGES (Vacant Erven):		Not applicable to land owned or leased from Council and not applicable if no Council sewer service is within 30m of affected property's boundary to Council land.						
1.1		Vacant erven excluding unproductive vacant land / where the connection to developed land is removed.(Eg Public open space, Private road, etc).	Per Month		96.96	111.50	y	102.70	118.10	5.92%
2		CONSERVANCY/SEPTIC TANKS:								
		Domestic / Commercial / Industrial / Departmental:								
		Office Hours:								
2.1.1	PCR	Residential Non-Indigent Erven: Reticulation Network not available.	Per kl	No free removals for non-indigent customers. One removal will not exceed 10 000 liters. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	128.52	147.80	-47.06%
2.1.2	PCR	Residential Indigent Erven: Reticulation Network not available.		First 6 removals per annum free for indigent households (may apply for additional relief). One free removal will not exceed 10 000 liters. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	128.52	147.80	-47.06%
2.2	PCR	Homeless Shelters: Reticulation Network not available	Per kl	First 6 removals per annum free. One free removal will not exceed 10 000 liters. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	128.52	147.80	-47.06%

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 Recalculated	2023/24 R	VAT Yes/No	2024/25 Recalculated	2024/25 R	% Increase / decrease
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
				Registered bona fide non-profit organisations, which operate homes which caters for the health of physically or mentally challenged individuals, and is serviced by a tanker service can apply a 80% rebate. Such organisations must be registered as such shelter by the relevant Council Committee/Body.						
2.3	PCR	Commercial / Industrial : Network not available	Per kl	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	195.13	224.40	-19.63%
2.4	PCR	Government / Schools / Sport Bodies / Miscellaneous: Network not available	Per kl	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	195.13	224.40	-19.63%
2.5	PCR	Departmental : Network not available .	Per kl	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	195.13	224.40	-19.63%
2.6.1	PCR	Non-Residential - If reticulation network is available: add availability fee (as for vacant erven)	Per kl + * availability charge per month	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	195.13	224.40	-19.63%
2.6.2	PCR	Residential - If reticulation network is available: add availability fee (as for vacant erven)	Per kl + * availability charge per month	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	128.52	147.80	-47.06%
2.7.1	PCR	Residential Non -indigent erven - Special service requests after hours - Health Risk reasons	Per kl	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	171.30	197.00	-29.44%
2.7.2	PCR	Residential Indigent erven -Special service requests after hours - Health Risk reasons	Per kl	Removal may be considered as part of part of first 6 free removals. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	171.30	197.00	-29.44%
2.7.3	PCR	Non-Residential - Special service requests after hours - Health Risk reasons	Per kl	No free service. Users will be permitted to make use of private contractors, provided that the contractor adheres to the legal requirements for safe disposal.	242.78	279.20	y	260.09	299.10	7.13%

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24	2023/24	VAT	2024/25	2024/25	% Increase / decrease
					Recalculated	R	Yes/No	Recalculated	R	
					excl. VAT	incl. VAT		excl. VAT	incl. VAT	
3		(Surcharge for) STORMWATER DISCHARGE TO SEWERAGE SYSTEM:	Monthly charge per m ² of runoff area							
3.1	FCR	Surcharge for Authorised Stormwater discharge to Sewerage System, all land uses	Monthly charge per m ² of runoff area	Only for existing agreements or where the Director: Commercial Water & Sanitation deems that a reconnection to the storm water system is not practical.	12.70	14.60	y	13.48	15.50	6.16%
3.2	FCR	Surcharge for Unauthorised Stormwater discharge to Sewerage System, all land uses	Monthly charge per m ² of runoff area	Upon discovery, a 3-month notice period will be applicable before the surcharge will be levied.	25.39	29.20	y	26.87	30.90	5.82%
4		INDUSTRIAL EFFLUENT:								
4.1	FCR	Treatment cost excluding conveyance cost			4.43	5.10	y	4.70	5.40	5.88%
4.2	FCR	Surcharge factor (SF) for all authorized Industrial Effluent discharged into the sewerage system.	Per sample	Applicable to all nonconforming Industrial Effluents that have an immediate detrimental effect to the conveyance and wastewater treatment plants, as per Schedule 2 of the Wastewater By-Law. (X = Concentration)						
		Surcharge factor (SF) for each of the following (Fe;Pb;Zn;Ni;Cd;Cr;Cu;CN)& pH.								
4.2.1	FCR	Surcharge factor (SF) for all parameters	Per sample	Applicable to all Industrial Effluent discharges that do not meet the limits in the Wastewater By-Law.	SF = Y(X-L)/Ls	SF = Y(X-L)/Ls	y	SF = Y(X-L)/Ls	SF = Y(X-L)/Ls	
4.3	FCR	Re-inspections due to non-compliance		In respect of a specific contravention of the Wastewater & Industrial effluent by-law or served notices of the Council in this regard, whether continuous or interrupted in a 12 month period, there will be an additional charge levied to the owner based on costs incurred as a result of the extra-service, as stipulated in the Sanitation Miscellaneous tariff schedule. 1st inspection for tariff/billing purposes - No charge						
4.3.1	FCR	1st inspection for tariff/billing purposes		No Charge						

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 Recalculated excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 Recalculated excl. VAT	2024/25 R incl. VAT	% Increase / decrease
4.3.2	FCR	Follow up inspection / engagement due to non-compliance	Per visit (excluding sampling and analysis)	An additional charge for the recovery of costs incurred by Council for the control and regulatory monitoring of Industrial Effluent dischargers.	1 113.22	1 280.20	y	1 178.87	1 355.70	5.90%
4.3.3	FCR	Follow up inspection due to non-compliance (Non-Heavy Metal and any other parameter/substance)	Per visit (includes sampling and analysis)	An additional charge for the recovery of costs incurred by Council for the control and monitoring of Industrial Effluent dischargers from Non-Heavy Metal and any other parameter/substance entities who dispose industrial effluent into Council sewer.	1 969.30	2 264.70	y	2 085.48	2 398.30	5.90%
4.3.4	FCR	Follow up inspection due to non-compliance (Heavy Metal)	Per visit (includes sampling and analysis)	An additional charge for the recovery of costs incurred by Council for the control and regulatory monitoring of Industrial Effluent dischargers due to Heavy Metal entities who dispose industrial effluent into Council sewer.	4 432.70	5 097.60	y	4 694.26	5 398.40	5.90%
4.4	FCR	Regulation Agreement handling fee		Where a consumer applies for an industrial effluent permit / treated effluent supply / registration as a Water Services Intermediary as stipulated in the Wastewater and Industrial effluent by-law,Treated or Water by-laws,respectively, as updated,an applicable and non-refundable charge will be levied to the applicant, for administrative costs associated with the processing of such application, according to the relevant Miscellaneous tariff schedule and reviewed annually.	411.48	473.20	y	435.74	501.10	5.90%
4.5	FCR	Industrial Effluent pipe refurbishment / replacement performed by Council		Where a pipe is refurbished / replaced due to effluent non-compliance by the user	Full cost recovery	Full cost recovery	y	Full cost recovery	Full cost recovery	
4.6	FCR	Direct Disposal Permit Application Fee		Where the discharger applies for disposal of Wastewater/Chemical toilets at designated facility, an applicable and non-refundable charge will be levied to the applicant , for administrative costs associated with processing of such application , according to the relevant miscellaneous tariff schedule and reviewed annually.	130.52	150.10	y	138.26	159.00	5.93%

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 Recalculated excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 Recalculated excl. VAT	2024/25 R incl. VAT	% Increase / decrease
5		NEW CONNECTION:								
5.1		SEWER CONNECTIONS (Installed by Developer and applicable to <u>all</u> as development requirement)								
5.1.1	FCR	All sizes new connection by Developer (first connection)		Inspections + Assessments + Work Permit + Admin	1 100.43	1 265.50	y	1 165.39	1 340.20	5.90%
5.1.2	FCR	All sizes new connection by Developer (first connection) - Low Cost Housing (Indigent) Developments			550.26	632.80	y	582.70	670.10	5.89%
5.2		SEWER CONNECTIONS (Additional Connection required)								
5.2.1	FCR	All sizes new connections (additional connection)		Inspections + Assessments + Work Permit + Admin	1 100.43	1 265.50	y	1 165.39	1 340.20	5.90%
5.2.2	FCR	All sizes new connections (additional connection) - Implemented by Council		Cost = Labour + Material.	Full cost recovery	Full cost recovery	y	Full cost recovery	Full cost recovery	
		Note: Implementation of additional new connections may be performed by private contractors. In such cases only payment of tariff 5.2.1 will apply.			Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
6		DISPOSAL / TESTING / BLOCKAGES:								
6.1	FCR	Waste water - Disposal at designated facility for For External and Internal purposes)	Per kl		24.52	28.20	y	26.00	29.90	6.03%
6.2	FCR	Chemical Toilet - Disposal at designated facility.(For External and Internal purposes)	Per kl		57.57	66.20	y	60.96	70.10	5.89%

WATER AND SANITATION SERVICES- SANITATION (MISCELLANEOUS)										
	CAT.	SERVICES RENDERED	UNIT	REMARKS	2023/24 Recalculated excl. VAT	2023/24 R incl. VAT	VAT Yes/No	2024/25 Recalculated excl. VAT	2024/25 R incl. VAT	% Increase / decrease
6.3	FCR	Testing of sewers/ inspection of new sewers	Per test		1 036.70	1 192.20	y	1 097.83	1 262.50	5.90%
6.4	FCR	Sealing of sewer connections on demolition of property served	Per seal		903.83	1 039.40	y	957.13	1 100.70	5.90%
6.5		Clearing of domestic private SEWERAGE BLOCKAGES (Upstream of boundary chamber - only if a Health risk):								
6.6	FCR	Office Hours : Supervisor's approval			586.26	674.20	y	620.87	714.00	5.90%
6.7	FCR	After hours : Sundays/Public Holidays : Supervisor's approval			869.13	999.50	y	920.43	1 058.50	5.90%
7		WORKS AT CUSTOMERS PREMISES								
7.1	FCR	Works at customers premises per specific request			Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%
8		OTHER:								
8.1		MASTER PLANNING								
8.1.1	FCR	Provision of Master Planning capacity analysis and information on available infrastructure - Water and Sanitation	Final Cost	Provision of information on available infrastructure capacity for potential developments.Final charge will be based on actual cost of hours worked plus printing/reproduction costs plus admin charge.	Cost + R376.35 Admin Charge	Cost + R432.80 Admin Charge	y	Cost + R398.55 Admin Charge	Cost + R458.30 Admin Charge	5.90%

City of Cape Town – 2025/26 Budget (June 2025)
Annexure 41 - Metro Trading Services Reform Programme - Trading Services Reform Strategies and Associated Implementation Road Maps

Budget: Expenditure

Tariff Funded:

CostCenterGroup W ATER_SERV Water & Sanitation TariffFund
CostElementGroup C ITY_EXP Income StatementExpenditure

Cost elements	2023/24 V1	2023/24 Actuals	Approved Budget	
			2024/25	
***** Employee Related Cost	2 689 199 646.31	2 393 254 345.62	2 692 130 003.95	
***** Debt Impairment (1)	629 907 999.84	727 803 837.64	596 604 000.04	
***** Collection Costs	2 895 959.52	7 726 883.67	2 895 959.50	
***** Depreciation & asset impairment	670 275 318.52	708 170 062.06	803 803 537.79	
***** Contracted Services	1 249 972 354.35	1 270 183 147.43	1 342 015 694.38	
***** Transfers and Subsidies	30 450 000.00	28 216 517.87	28 328 492.00	
***** Other Expenditure: Bulk Purchases	147 540 018.07	136 678 223.91	181 860 598.10	
***** Other Expenditure	692 369 032.65	803 201 374.60	827 414 681.58	
***** Losses	8 890.71	2 057 884.06		
***** Repair & Maintenance Primary Cost	869 659 303.04	1 059 382 525.90	1 021 923 252.71	
***** Oper Grants & Donation Projects: Primary	46 092 000.00	24 790 739.07	59 239 929.00	
***** Insurance Fund	1 071.19	7 322.89	1 071.19	
***** Expenditure External - Primary	7 028 371 594.20	7 161 472 864.72	7 556 217 220.24	
***** Appropriation to Reserves	46 286 076.00	50 241 713.74	72 213 388.00	
***** Depreciation Offsets	159 824 821.55-	176 606 535.56-	180 716 712.60-	
***** Other Appropriation Adjustments	380 956 828.00	369 957 893.27	347 899 261.00	
***** Appropriations	267 418 082.45	243 593 071.45	239 395 936.40	
***** Repair & Maintenance Secondary Cost	689 803 486.94	664 390 138.03	726 371 844.81	
***** Oper Grant & Donation Project: Secondary		230 945.79	2 020 092.00	
***** Expenditure Internal - Secondary	689 803 486.94	664 621 083.82	728 391 936.81	
***** Internal Utilities Expenditure	265 327 311.85	264 123 558.45	297 232 662.61	
***** Bulk Charges Expenditure	1 647 019 691.35	1 816 609 709.90	1 987 024 429.18	
***** Interest Internal Borrowings	993 731 615.63	916 938 406.54	1 370 058 812.11	
***** Insurance Departmental Premiums Expense	35 537 317.00	38 329 207.94	43 375 680.80	
***** Activity Based Costs to Capital Account	332 614.97-	142 091.44-	4 729.04-	
***** Activity Based Costs to Operating Acc	672 581 741.22-	629 387 040.93-	724 158 551.82-	
***** Support Services	747 707 158.97	729 936 401.33	798 006 254.14	
***** Internal Charges - Secondary	3 016 408 738.61	3 136 408 151.79	3 771 534 557.98	
***** Over/underabsorption	11 002 001 902.20	11 206 095 171.78	12 295 539 651.43	
Collection Ratio - Water			91.50%	
Collection Ratio - Sanitation			93.00%	

Note (1): Provision made for Debtors Working Capital Reserve

Rates Funded:

CostCenterGroup 20040320 Catchment's Storm water
CostElementGroup C ITY_EXP Income StatementExpenditure

Cost elements	2023/24 V1	2023/24 Actuals	Approved Budget	
			2024/25	
***** Employee Related Cost	59 833 993.34	56 240 470.57	69 066 875.00	
***** Depreciation & asset impairment	2 531 379.65	3 105 271.46	4 685 353.43	
***** Contracted Services	16 823 248.40	15 117 508.51	17 206 723.88	
***** Transfers and Subsidies	3 000 000.00		3 000 000.00	
***** Other Expenditure	1 945 991.62	1 507 998.33	1 940 380.82	
***** Repair & Maintenance Primary Cost	96 296 899.44	92 458 558.37	101 048 925.26	
***** Oper Grants & Donation Projects: Primary		3 299 305.93		
***** Expenditure External - Primary	180 431 512.45	171 729 113.17	196 948 258.39	
***** Appropriation to Reserves		171.14		
***** Depreciation Offsets	264 482.22-	411 099.57-	434 839.81-	
***** Other Adjustments	44 311 993.00	32 670 209.57	28 343 021.00	
***** Appropriations	44 047 510.78	32 259 281.14	27 908 181.19	
***** Repair & Maintenance Secondary Cost	557 616.48	408 275.31	570 111.52	
***** Expenditure Internal - Secondary	557 616.48	408 275.31	570 111.52	
***** Internal Utilities Expenditure	5 918 310.09	29 243 535.76	23 524 925.51	
***** Interest Internal Borrowings	25 158 268.40	15 632 292.93	34 194 374.34	
***** Insurance Departmental Premiums Expense	162 059.00	170 956.50	174 986.47	
***** Activity Based Costs to Operating Acc	5 999 935.16	11 745 317.03	5 550 011.76	
***** Support Services	40 712 935.00	40 501 473.47	37 722 884.19	
***** Internal Charges - Secondary	77 951 507.65	97 293 575.69	101 167 182.27	
***** Over/underabsorption	302 988 147.36	301 690 245.31	326 593 733.37	



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

Annexure A

Electricity and Energy Trading Service Reform Strategy

Energy Directorate
January 2025

The following comprises an amalgamation of existing Council approved and public Energy strategies and plans, which are currently reflected in the IDP and approved City Budgets. The purpose of this document is thus to ensure a consolidation, as required by the National Treasury Trading Services Reform Programme, of existing Council approved strategies and plans.

Updated as required by National Treasury

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

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1. Introduction

The National Treasury has recognised the deteriorating state of infrastructure platforms that is driving the decline in the performance of electricity trading services. This decline is negatively affecting economic growth and the financial sustainability of cities in South Africa, which relies on cash revenues from well-performing trading services. To address this issue, the National Treasury has initiated reforms to enable electricity trading services in metropolitan municipalities through performance-based financial incentives to reward good decisions and performance.

The objectives of this reform include the list below as implemented through financial, institutional, and organisational reform:

- Improve operational efficiency and reduce losses
- Enhance service quality and reliability
- Increase cash revenues and financial sustainability
- Develop a fit-for-purpose organisational structure for electricity trading services

The City of Cape Town welcomes the opportunity to submit a Trading Services Reform Strategy (TSRS) and related plans; namely Institutional Roadmap and Business and Investment Plan. The Energy Directorate of the City of Cape Town is referred to as the electricity utility in this document. This Trading Service Reform Strategy for the Electricity Utility in the City of Cape Town provides a review of historic performance trends and their underlying drivers along with a strategy for improvement based on enhancements to organisational structure, institutional capacity, financial management, and investment planning. The table below aligns the requirements for Annexure A from the National Treasury's Guidance notes with the sections in this Strategy.

Table 1: Table showing alignment between Trading Services Reform Programme criteria and the document contents

Criterion	Section in Strategy
Does the Energy TSRS recognise and document the trends in services performance and the underlying drivers of these trends?	Section 2: Current State: Overview of the Municipal Energy Services Business in Cape Town
Does the Energy TSRS recognise and document institutional and governance arrangements and their implications for service delivery performance?	Section 2.5: Current Institutional Arrangements and Governance
Does the Energy TSRS adequately recognise the roles of all components of an effective utility?	Section 2.5: Current Institutional Arrangements and Governance
Does the Energy TSRS provide a clear overall direction?	Section 3: A Future-fit Utility Business
Does the Energy TSRS sufficiently outline an institutional and governance road map?	Section 4: Overview of the Institutional Reform Roadmap
Does the Energy TSRS sufficiently outline capital investment & operational business plans	Section 5: Overview of the Business and Investment Plan

The City of Cape Town Municipality has made some movement towards establishing a Business Unit and a Single Point of Management Accountability (SPoMA) for the Energy Trading Service. However, this is not yet achieved in full, but is aimed for. To implement this greater level of accountability, the City commits to review the current people, processes, and systems in place that govern the relationship with the City to evaluate how they either enforce or detract from the establishment of SPoMA. With this review and analysis, the City is then able to determine the most appropriate pathway to establish a business unit and SPoMA with the potential reform of key aspects of the municipal energy value chain.

Importantly, while it is acknowledged that the City of Cape Town electricity utility meets many of the conditions for trading services reform at present, there are still opportunities for improvements and enhancements. These enhancements incorporate the critical reforms required to ensure clear

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accountability for the delivery of the service and to adapt to a changing energy sector related to the disruptive energy technologies, the Just Energy Transition, and the establishment of the South African Wholesale Electricity Market, to name a few.

2. Current State: Overview of the Municipal Energy Services Business in Cape Town

2.1. The changing energy landscape

Globally, there are a number of megatrends being experienced in the energy sector. Cape Town's energy system is experiencing similar trends and must therefore respond to and prepare for these appropriately. A brief description of these megatrends and their impacts are provided in this section. It is also important to note that while these trends are represented individually, they are, in fact, interdependent.

Digitalisation	Digitalisation of energy systems speaks to the use of digital technologies across energy demand, supply, and distribution processes to enhance performance and cost effectiveness of energy, as well as communicate in real-time.
Decentralisation	Decentralisation, especially in electricity generation, in the energy sector has taken place both through shifts in regulation in South Africa and through the emergence of smaller, more modular energy technologies.
Disruptive Technologies	The rapid pace of technological innovation has resulted in the emergence of technologies that radically alter how our energy systems function.
Decarbonisation	The threat that climate change poses to humanity's prosperity and survival on Earth requires urgent efforts to reduce greenhouse gas emissions, while also adapting to the changing climate systems.
Democratisation	There is a growing demand from cities, residents, organisations, and communities to have increased participation in decision-making regarding energy: whether this is the source of energy, how energy is used, and the business models that govern the energy system.

Figure 1: Summary of key global trends in the energy sector.

Within the electricity sector in particular, these global trends are manifesting in significant changes to how the electricity system operates, as shown in Figure 2.

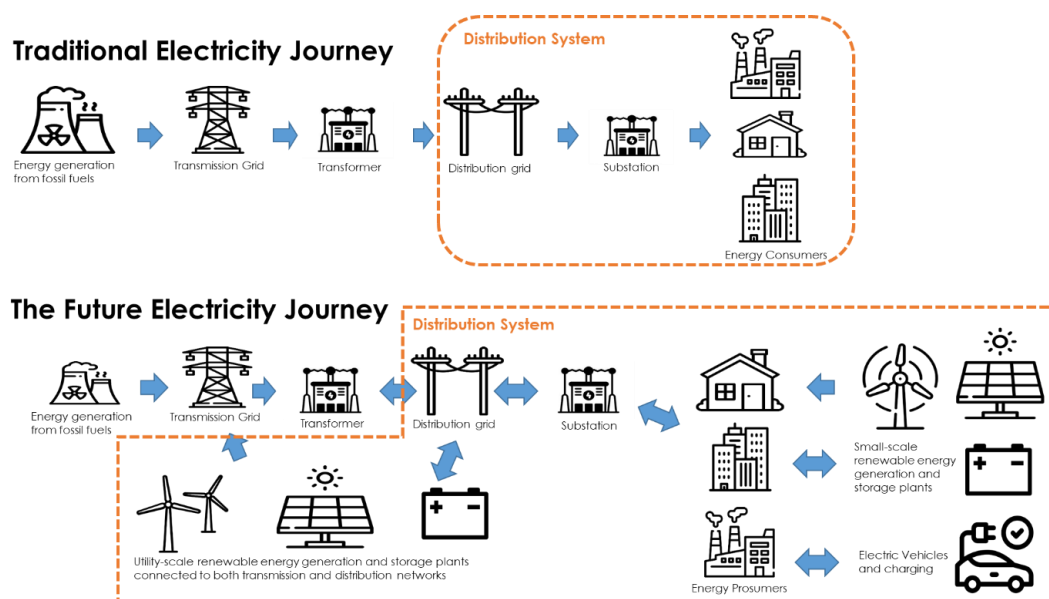


Figure 2: Moving from the traditional electricity system to the future electricity system. Adapted by author from <https://www.cleanfuture.co.in/2018/07/03/dso-modernizing-the-power-grid/> using images from Flaticon.com

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The traditional electricity network is built for a one-way flow of electricity from large, centralised power plants, to customers and assumes that customers would only consume electricity provided by the grid, known as a more passive role. Within this traditional energy system, there is a low level of monitoring and control as most issues are assumed to be dealt with in the design and planning stage. The future electricity network, however, should be able to accommodate a two-way flow of electricity at certain points, where a customer is both a producer and consumer of electricity, known as a prosumer and plays a more active role in energy management. This future network requires far greater levels of real-time monitoring and control with active system management as more issues are expected to arise during operations and must be responded to quickly in order to balance the network.

There have been significant shifts in the national energy policy landscape in South Africa over the past few years, both in response to changing energy markets and the ongoing negative impact of load shedding. This includes amendments to the Electricity Regulation Act, the Just Energy Transition Framework and Investment Plan, and the Renewable Energy Master Plan, to name a few. It is important to note that the National Integrated Resources Plan of 2019 is also currently under review and will have a bearing on the national energy market and the opportunities available to the City of Cape Town to diversify and decarbonise energy supply. Common features of these national plans and policies include:

- Increased support for a competitive energy supply market with greater private sector participation
- The regulatory framework for unbundling the national utility, Eskom
- Shifts to decarbonise energy supply
- The localisation of energy value chains for job creation
- Seeking to harness the economic and energy security benefits of new energy technologies, such as electric vehicles and hydrogen
- Support for reskilling of workers in fossil fuel-based industries

Change in Cape Town's energy system is interconnected with global and national energy trends. However, the way in which these trends manifest within a city are unique and therefore need to be understood as a basis for decision-making within the strategy. Through combining data from the four focus areas noted below, it is possible to establish a baseline of key shifts and stresses that are core components of the changing energy system in Cape Town.

- **Energy Governance:** Historically, the governance of the South African energy system has been predominantly held by national government. With new regulations, this is now increasingly decentralised with a wider range of decision-making in the energy governance system; whether municipalities, residents or the private sector. The City also now has more levers available to take a stronger role in energy governance within the municipal boundaries.
- **Energy Cost:** The cost of electricity is still regulated at the national level with above-inflation increases being experienced annually over the past 15 years - with the cost of electricity now being 400% greater than the cost of electricity in 2004. For liquid fuels, there has been an increase in price volatility due to supply chain disruptions and global geo-political shocks that have disrupted value chains across the world.
- **Energy Supply:** In Cape Town, Eskom has been the majority supplier of electricity, accounting for 99% of supply historically, with the City being the only reseller to customers. The electricity supplied is mainly from coal and has a very high grid emissions factor and carbon intensity. Load shedding has resulted in there being an increase in disrupted electricity supply. Most new electricity supply is from renewable energy sources resulting in some decarbonisation. There has been a noticeable increase in small-scale embedded generation projects by customers and the emergence of wheeling between private generators and customers over the City's grid.

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- **Energy Demand:** Overall, energy demand in Cape Town has been increasing over time, with the energy demand reductions experienced during the Covid-19 pandemic (2020-2021) rebounding. The daily demand for electricity is still characterised by high morning and evening peak loads. There has been a decline in electricity purchases from the City of Cape Town due to investments in energy efficiency and small-scale embedded generation, especially by higher income residential customers and commercial customers. With the increase in load shedding, there has been higher use of diesel and gas as alternatives to electricity, along with higher use of on-site generation technologies, such as photovoltaics.

The City of Cape Town anticipates a steady increase in population, with the majority of new households expected to be in the lower-income categories, with a low rate of economic growth over the foreseeable future. It is anticipated that energy demand will continue to be suppressed due to lower economic activity and growth in lower-income customer segments that use less energy per capita. This will impact on the availability of financial resources to finance critical activities and projects needed to navigate the energy transition, along with ensuring sustainable sources of funding for subsidised energy services to lower-income households.

2.2. Electricity Supply Areas

Two electricity service providers¹ operate within the municipal borders of Cape Town, as shown in Figure 3, namely the City's electricity utility, and the national power utility, Eskom. Each of these entities holds an electricity distribution licence for a specific supply area in Cape Town. This means that approximately two thirds of electricity customers are served by the City of Cape Town, with the remaining third of customers served directly by Eskom.

2.3. Utility Performance Trends

The City of Cape Town Municipality's Electricity Trading Service monitors financial, technical, and operational performance on a regular basis. The indicators used are a combination of publicly reported corporate reporting and electrical system data that, together, give a holistic picture of performance. Overall, the City's Electricity Trading Service is in an adequate financial position and provides a high quality of service. This is however under strain due to pressures on the current business model from consistently declining sales, well above inflation increases to energy costs and the occurrence of theft, vandalism, and encroachment in certain parts of the network. In order to maintain the high quality of services and ensure long-term financial sustainability, the utility must therefore adapt and



Figure 3: Licensed distribution service authorities - yellow is the City Supply Area and Blue is the Eskom Supply Area

¹ In Cape Town, there is one distribution service authority with two licence holders, one being the City of Cape Town and the other Eskom.

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reform. The section below provides more detail on a selection of performance indicators and unpacks the key driving forces behind these trends.

2.3.1. Network Reliability

The indicators below outlines the City's measures for achieving network reliability, along with the reliability targets. The graphs shown below indicate that the Electricity Trading Service has generally met or exceeded the required benchmarks for at least the past 5 years. This high quality of service can be attributed to a dedication to service delivery across the electricity value chain; from timeous investment into the network, high standards for asset creation, management, and operations to sufficient capability to manage and implement preventative projects and respond to faults timeously. This is supported by good governance and procurement strategies.

The overall low fault rate and short system restoration time (excluding scheduled load-shedding) is reflected by the CAIFI, SAIFI and SAIDI indices below. For the City of Cape Town network these have been estimated using a load based approach. CAIDI deviates from this trend because while overall system restoration time is within target range it has been increasing relative to the frequency of system interruptions meaning that some customers have experienced longer outages than the reliability targets. This is due to a number of factors; primarily the system impact of increased stress on switchgear and transformers caused by load shedding over this period and is further impacted by theft and vandalism of the network (which increases in line with load shedding).

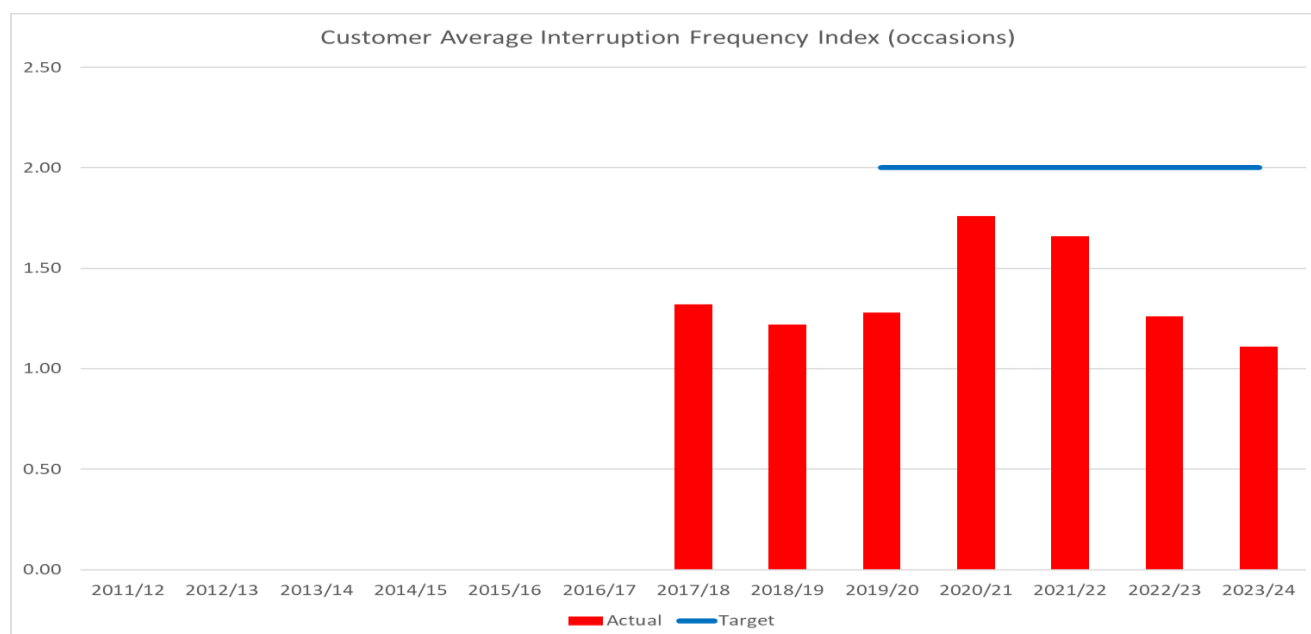


Figure 4: CAIFI – The average frequency of interruptions as experienced per customer, measured in occasions.

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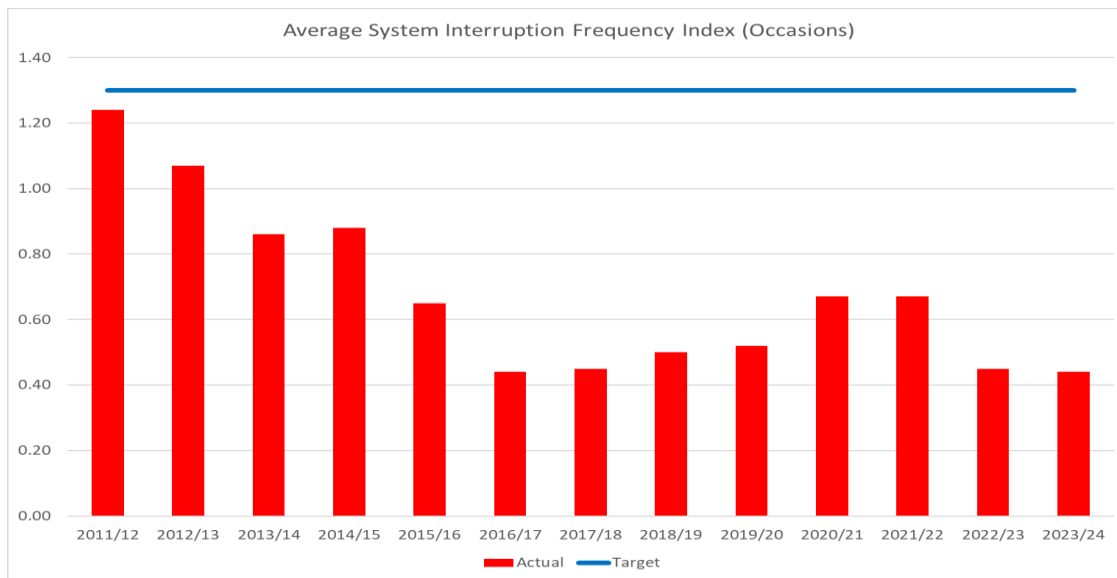


Figure 5: System average interruption frequency index (SAIFI/ ASIFI) indicates the average system interruptions experienced by a customer over a year.

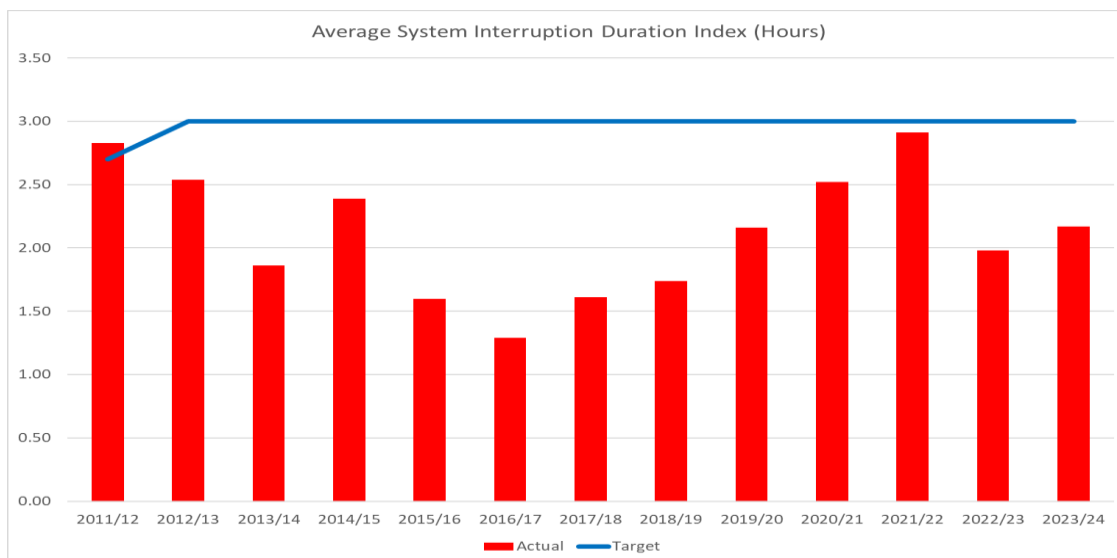


Figure 6: System average interruption duration index (SAIDI/ASIDI) indicates the average system interruption duration in hours over a year.

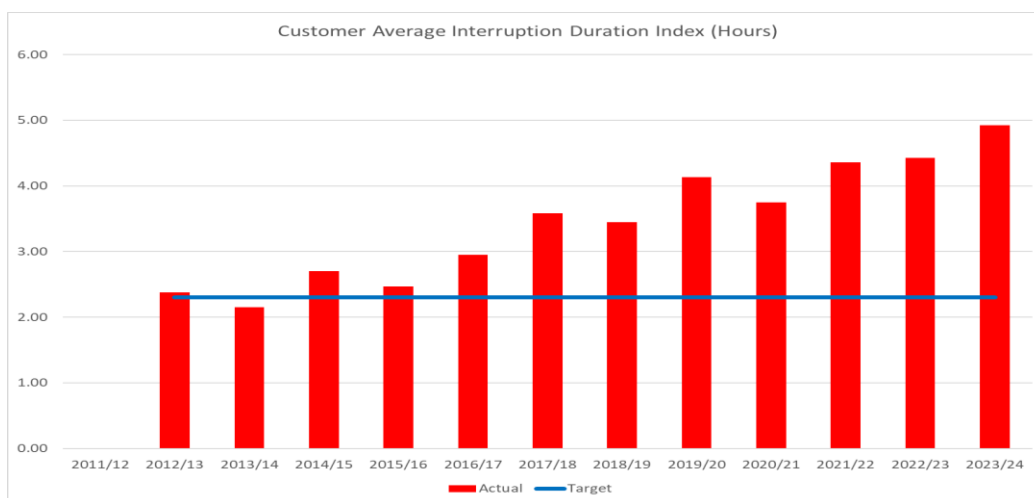


Figure 7: CAIDI – The average duration of an interruption as experienced per customer, measured in hours during a year.

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2.2.2. Network losses

The Energy Directorate also reports on electricity losses in corporate scorecards. Electricity losses have two components: technical and non-technical. Technical losses arise from power dissipation due to the impedance in electricity system components, such as transmission and distribution lines, transformers, and measurement systems. Transmission at higher voltages reduces losses; therefore as deep residential low voltage networks expand as a city grows, technical losses can be expected to increase. Non-technical losses are electricity that is consumed but not metered or accounted for and generally caused by actions external to the power system consisting primarily of electricity theft, faulty or inaccurate meters, and errors in accounting and record-keeping. Losses are a measure of unaccounted-for energy and therefore non-payment is not included as losses. Given that non-technical losses are unmetered, estimates rely on assumptions and modelling of the network and customer base. While total losses are the difference between metered bulk electricity purchases and sales to customers, municipalities have also recently been required to estimate non-technical electricity losses and to document their assumptions. The target for technical and non-technical losses was set at 12% in 2021/22 to align with national regulations. The City typically operates at around 11.0 to 11.5% total losses when there are no distorting factors, such as load shedding or changes in Eskom billing dates. Two figures are reported:

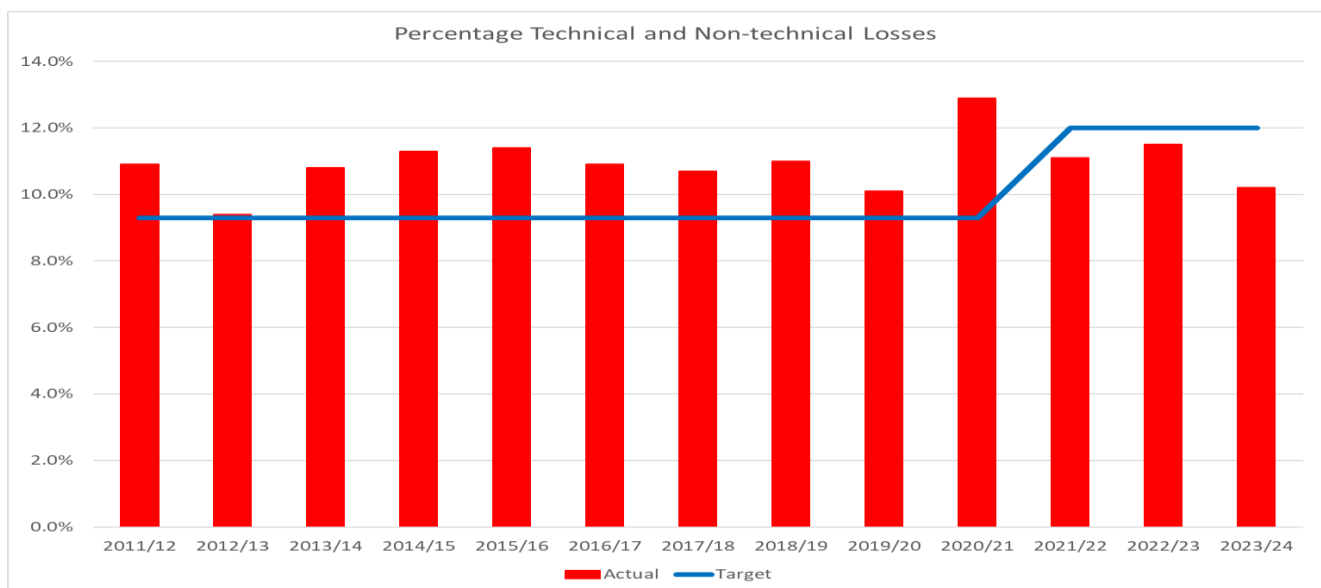


Figure 8: Percentage of total electricity losses (target is to have <12% losses)

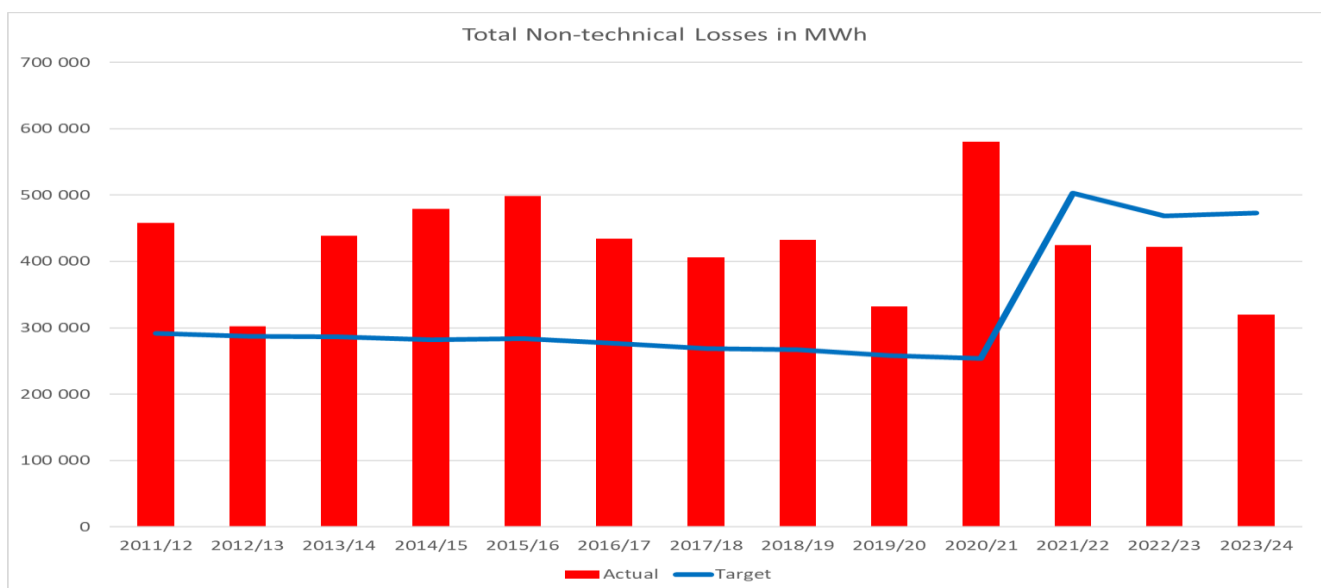


Figure 9: Total non-technical electricity losses in MWh (estimate) (target is to have it less than 5.5% of system energy)

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The proportional growth of the low voltage network will drive a natural increase in technical losses, somewhat ameliorated by customer owned SSEG capacity that exports some of its production. In the short term, changes in technical losses reflect the quality of maintenance of cable joints, connectors and network components. Theft and vandalism directly increase non-technical losses. However, the City's dedicated revenue protection and metering systems and functions, along with the ongoing expansion of pre-payment meters, have kept total non-technical losses under control. The share of residential and small commercial pre-paid customers has risen from 76% in 2012/13 to 87% in 2023/24. Timing issues in reconciling large blocks of purchases and sales billing can cause annual discrepancies attributed to non-technical losses.

2.2.3. Generation

The City's current generation assets comprise Steenbras hydro pumped storage (180 MW, 2 200 MWh) and two small gas turbines, of which one is currently out of commission, which are usually only run in emergencies. Steenbras can be operated in a range of ways depending on the objective, which normally is a reduction in maximum demand or energy arbitrage. Steenbras has also proven to be highly beneficial in limiting the stages of load shedding experienced by City-supplied customers.

2.2.4. Distribution Network

The City's Distribution network is supplied from the national grid via 37 points of delivery. From these points of delivery, the City distributes the electricity through various Switching Stations to Main Substations (MSs). Main Substations transform the electricity voltage from 132 kV, 66 kV, and 33 kV to 11 kV for further distribution. A main substation footprint indicates the areas supplied by a particular main substation. The boundaries created by the main substation footprints can vary from time as loads are transferred between neighbouring main substations. The current main substation footprints with an indication of peak loading (2023) expressed as a percentage of firm capacity are illustrated in Figure 10: 2023 Main substation . Network design reliability is reflected by an index of firm vs. non-firm vs. over-firm capacity. Firm capacity indicates the network ability to withstand an N-1 fault condition, meaning that it is capable of experiencing an outage of a single network component without causing an interruption in electricity supply to customers. The firm capacity should not be confused with the total installed capacity of transformers or feeders. Over-firm capacity means the peak demand (in MVA) for the preceding year exceeded the firm network capacity, but are still within the total installed capacity of the infrastructure.

The legend of the map together with a definition of electrical system capacity is explained in Table 2: Definition of electrical system capacity

Table 2: Definition of electrical system capacity

Legend colour	Definition	Capacity Status
Green	Less than 70% of firm substation capacity	Spare firm capacity
Yellow	70% to 90% of firm substation capacity	Adequate firm capacity
Orange	90% to 100% of firm substation capacity	Risk of firm capacity being exceeded in the short to medium term.
Red	Over 100% of firm substation capacity	Over-firm capacity
White	The network is only designed for the normal system (N-0) condition. During a single system component failure electricity will be interrupted to the load supplied.	Non-firm capacity

In order to be able to react to customer demand and load growth, considering the lead time required to upgrade the capacity at main substations, loading at MSs should typically not exceed 95% of firm

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capacity, and network development plans (NDPs) should trigger interventions before reaching this point. From Figure 10, it is evident that the City operates and maintains a network in a good condition, with only a limited of load near or at firm capacity.

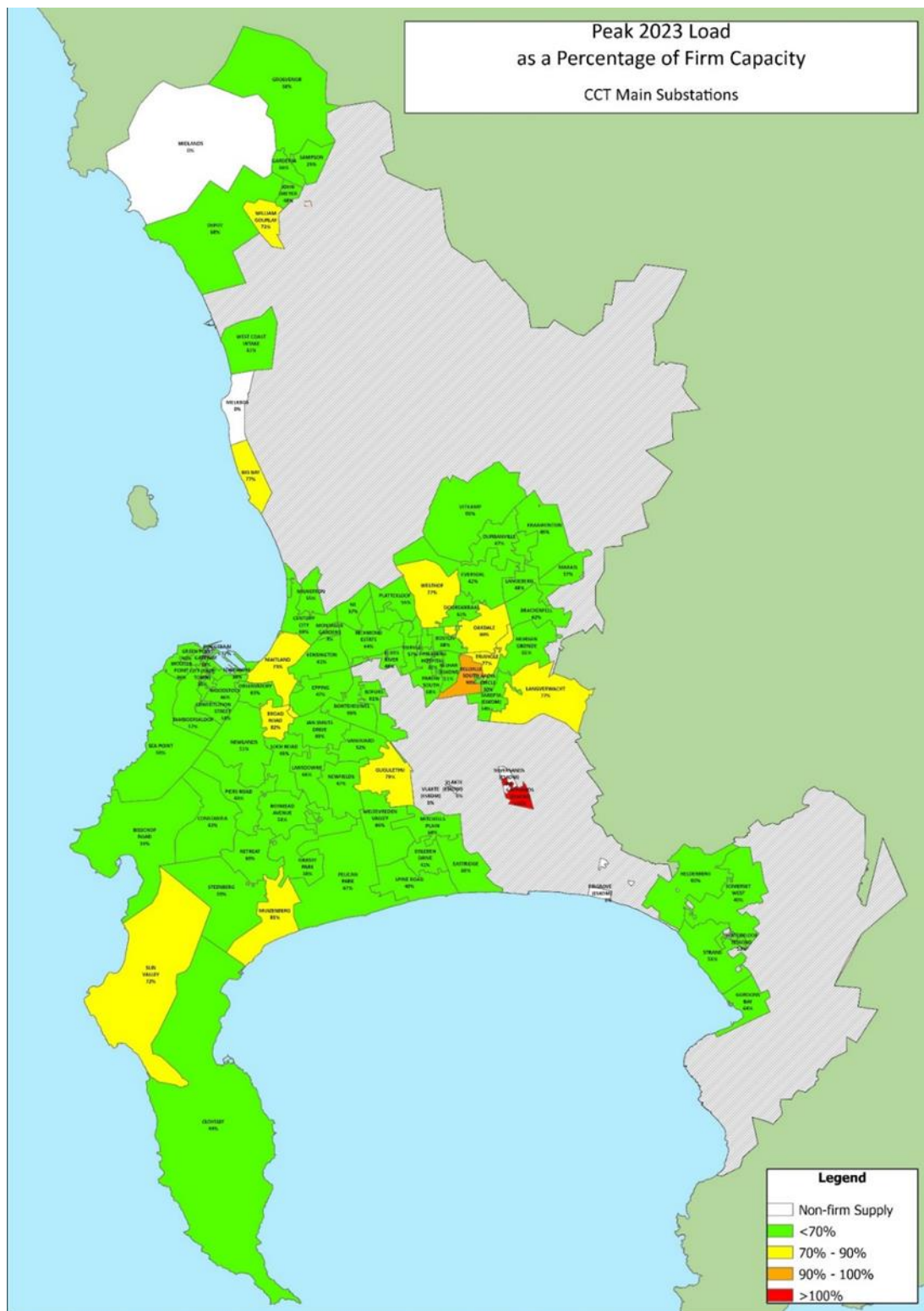


Figure 10: 2023 Main substation heat map

The state of electricity distribution network infrastructure in the City's municipal border as at January 2024 was as follows:

- The 11kV point of delivery from Eskom's Greysands substation has reached over-firm capacity. The firm capacity of this network was exceeded for only 132 (non-consecutive) hours in 2023 (i.e. less than 3% of the time). The City has already initiated a project to strengthen this network.

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The project is dependent on Eskom providing additional switchgear at their Silversands and Greysands substations.

- The Bellville South Main substation has reached 98% of its firm capacity. This network is in the process of being upgraded, with an additional 10 MVA firm capacity that is likely to be available by end of FY2026.
- There are City-supplied areas where the City's electrical infrastructure is firm, but where the upstream Eskom infrastructure is non-firm or over-firm, e.g. City MSs receiving power from Eskom's Philippi main transmission station (MTS).
- In response to constraints at the Eskom-owned Philippi MTS, which supplies the Southern Peninsula, the City looped one of the Mitchells Plain-Steenbras 132 kV lines in and out of Eskom's Pinotage MTS in 2020. This successfully prevented loss of supply for substantial periods during the Philippi transformer failure from October 2020 to June 2021.

2.2.5. Theft, Vandalism & Encroachment of electricity infrastructure

Theft, vandalism, illegal connections and encroachment are considerable risks to network infrastructure delivery and maintenance. These incidents impact both the quality of service and the financial sustainability of the utility due to direct financial losses, early replacement of infrastructure, increased maintenance time and staff requirements, the impacts on staff morale and because illegal connections that overburden electricity infrastructure and become safety hazards in communities need to be removed more frequently.

Vandalism of network infrastructure and public lighting increased sharply during the load-shedding intensive years of 2022 and 2023, peaking at nearly 1200 work orders caused by theft and vandalism costing an estimated R16.4 million in May 2023 alone. While these extreme levels have abated somewhat, theft and vandalism related works orders remain unacceptably high at over 500 per month. Although various measures for combating vandalism have been rolled out, the scale of the problem, particularly in high-incident areas, has resulted in instances of extensive service disruption and serious safety risks to staff and the public alike.

Drivers for theft and vandalism of electricity infrastructure include: Metal theft for scrap value, illegal connections driven by lack of access to electricity service, the affordability of electricity, service delivery protests, gang activities and load shedding. The City interventions under way include:

- Private security patrols;
- A dedicated law enforcement unit for energy;
- Alternative lighting solutions for un-electrifiable communities;
- Capacitating neighbourhood watch groups;
- Various hi-tech solutions under investigation;
- Opening satellite equipment stores for faster replacement of infrastructure;
- Appointing new public lighting contractors;
- Operational changes to the escalation of requests
- The appointment of more artisans.

The City alone cannot however combat theft and vandalism and requires the support and partnership of communities and law enforcement services.

Illegal connections are a growing social problem in some communities where they create a safety hazard for the public and accelerate the deterioration of the electricity infrastructure servicing the community. The intention is to develop an illegal connections action plan and to implement routine planned follow-ups in areas with high incidents of illegal connections, seeking to prevent the re-establishment of illegal connections and have a visible presence of law enforcement. Illegal connections often arise from issues related to affordability and the challenge of accessing electricity. The Directorate is committed to exploring innovative solutions to enhance access through electrification.

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Encroachment is a problem that requires a transversal intervention of stakeholders that include Transport, Urban Management, Building Inspectors, Law Enforcement, community leaders, the public, etc. The main area of concern is wall fences and buildings being extended beyond the erf boundary into areas designated as road reserve and services servitudes and in the process causing damage to infrastructure, including electricity infrastructure, installed in the road reserve and / or making access to the infrastructure for repairs and maintenance difficult and cumbersome.

2.3. Financial Performance Trends

In terms of Section 75A of the Local Government Municipal Systems Act (MSA), any fees, charges or tariffs which a municipality may wish to levy and recover in respect of any function or service of the municipality, must be approved by a resolution passed by the Municipal Council with a supporting vote of a majority of its members.

The City of Cape Town's annual budget for each financial year and the proposed electricity tariffs are released for public comment by Council towards the end of March each year. Council will consider the tariffs and public comment thereon before the end of May as per the requirements of Section 75A of the MSA and the Municipal Finance Management Act.

The **revenue model** considers:

- While population and demand growth are increasing the overall demand for electricity purchased has reduced. This is driven by technological advances and adaptations by consumers which impact on demand directly.
- Economic Growth is directly affected by tariffs as the energy input costs in many industries directly drive company competitiveness.
- Inflation which is largely driven by Eskom bulk purchase increases.
- Service Efficiency gains are considered part of normal business activities in order to ensure lower tariffs.
- Revenue and Debt Collection activities are a driving force to ensure all costs are adequately recovered from offending customers.
- Loss of sales volumes as a result of the mass adoption of alternative technologies. The substantial impacts of this are still being understood such that they can be forecasted.

2.3.1. Sales

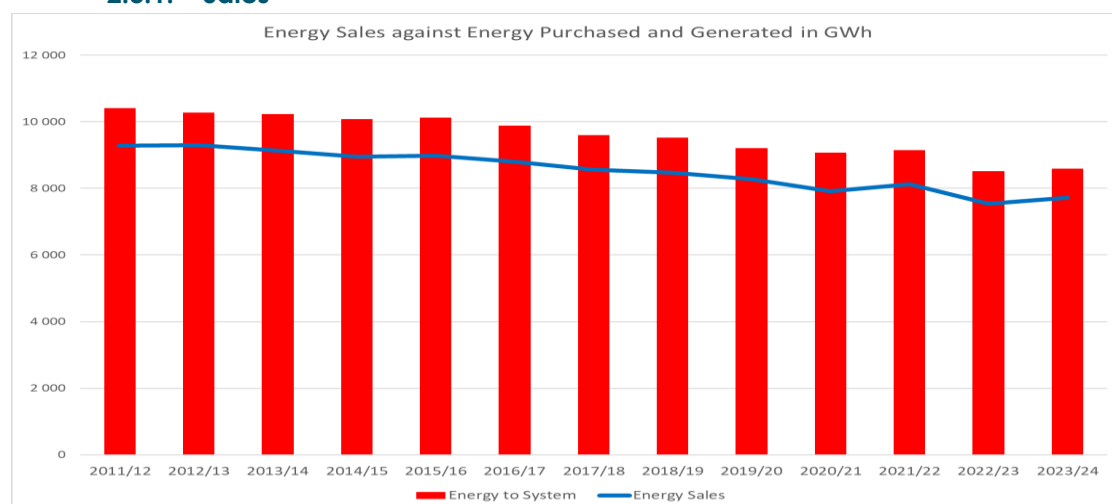


Figure 11: A Graph comparing energy sales to energy to system

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

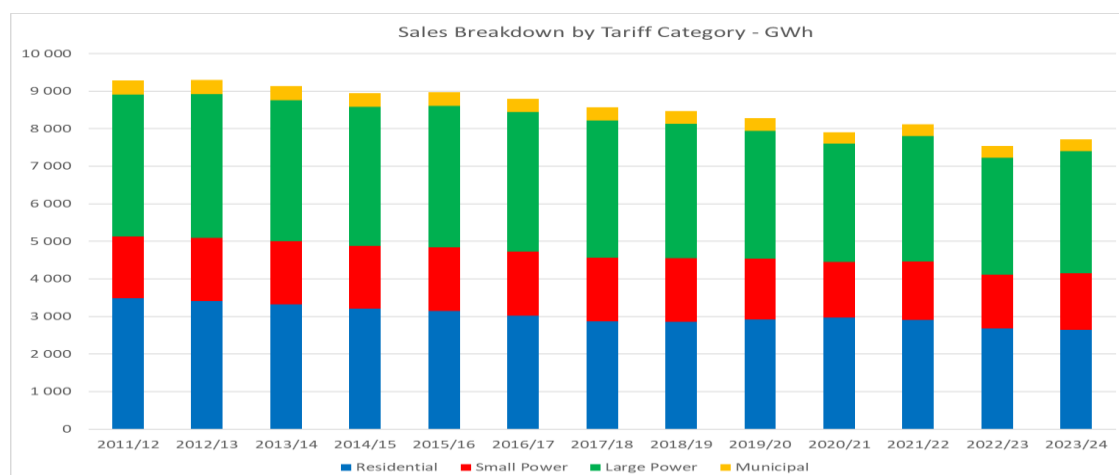


Figure 12: Sales Breakdown per tariff category

Annual sales have declined consistently at a rate of around 1.5% per annum while the customer base, especially those on subsidised tariffs, has been growing. Electricity Services revenue and the critical contribution to rates is based on kWh of electricity sold and is thus directly impacted. Increased energy efficiency of customers and continued high growth of Small Scale Embedded Generation (SSEG) capacity means that kWh of electricity sold and wheeled is likely to remain essentially static or drop further over the medium term without the counter drivers of high economic growth or more rapid electrification of transport.

2.3.2. Revenue Collection

The 12-month collection ratio has been maintained at the previous high levels. Payment occurs after the fact, and this indicator will continue to be closely monitored to ensure no slippage. It is expected that this is where one of the biggest challenges lie in the coming years. The prepayment metering fleet consists of 13 300 smaller commercial customers and approximately 545 400 residential customers. A large number of the smaller commercial customers (approximately 21 100) are on credit meters and account for approximately 22% of total revenue. Residential customers with credit meters (approximately 81 700) are now being read in line with targets, and estimations are being billed in this group where it is not possible to read the actual meters. In the years where there was a revenue collection rate above 100%, it indicates that previous financial period's arrears were recovered.

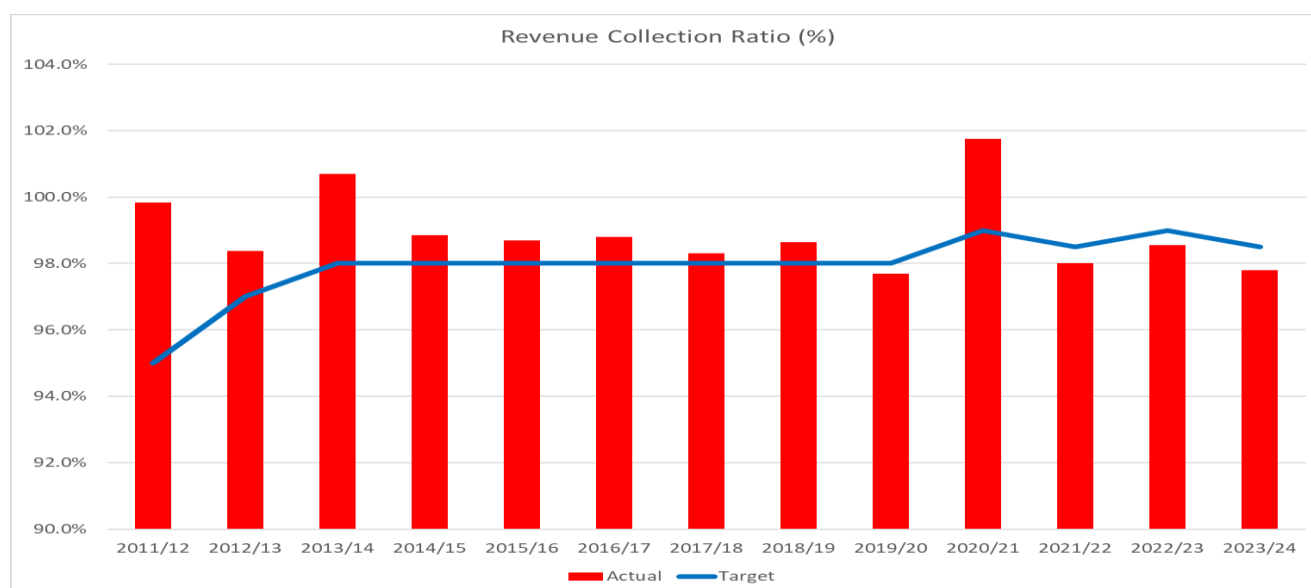


Figure 13: Revenue Collection Ratio over time

Managing Revenue Risks

Risks to achieving revenue projections include, but are not limited to:

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

- Security and quality of supply;
- Lack of economic recovery post-pandemic;
- Increase in the indigent register;
- Load shedding;
- Other major international events that are unforeseen (e.g. wars that impact on global markets and prices) and
- Lack of cost-reflective tariffs.

The electricity utility has taken due care to ensure that risks that could impact on the non-achievement of the directorate's objectives are identified, addressed and managed on a day-to-day basis in accordance with the City's approved integrated risk management framework. Risk registers are utilised as a management tool in order to manage identified risks of the directorate. The risks identified will be reported to RiskCo in accordance with the annual RiskCo Work Plan. The executive director must discuss the directorate's risks with the relevant Mayoral Committee member on a biannual basis.

2.3.3. Capital Budget Spend

Budget availability control has been in place for many years, ensuring that no funds for capital projects can be spent without first securing the necessary funding, as system controls prohibit this. Strict supply chain management controls are also in place to mitigate procurement and contract risks, an area that has undergone considerable auditor scrutiny over the past few years. The project pipeline and gate reviews, both at the corporate and departmental levels, help ensure that ready-to-implement projects are executed. Capital spending targets are set at 90%, which is ambitious yet achievable. Monthly monitoring and performance reviews are conducted through multiple reporting platforms, including portfolio committees and S71 reports. Demand and contract management performance are also critical components of the department's success in recent periods.

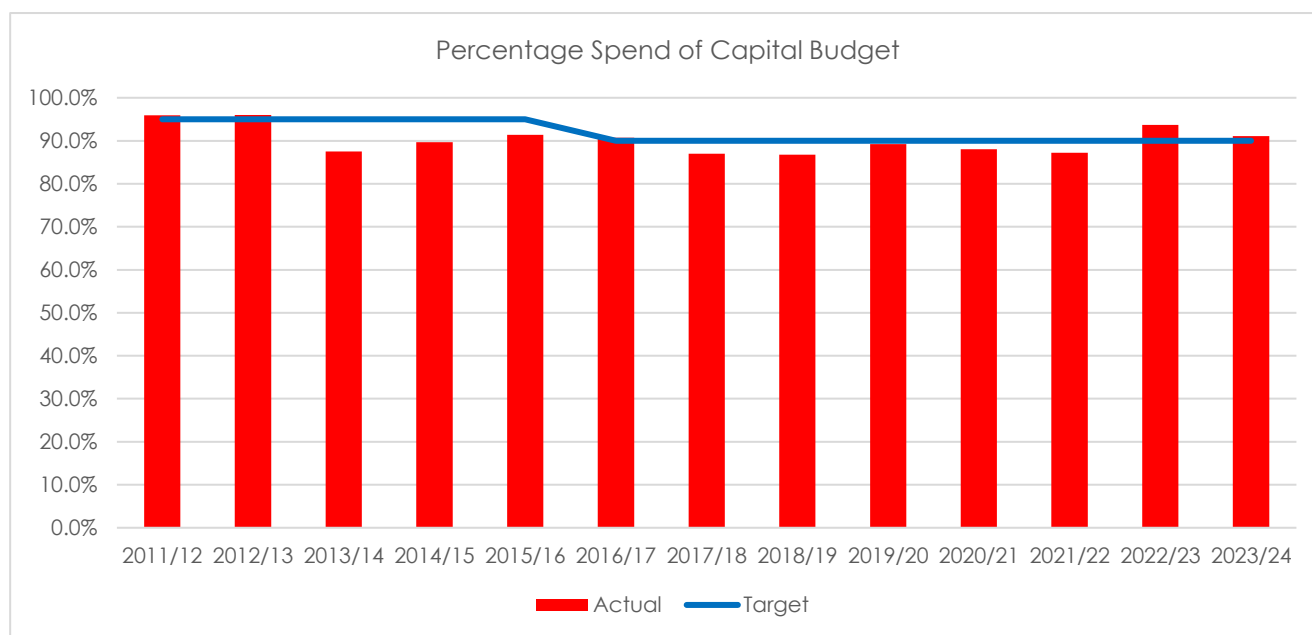


Figure 14: Percentage Capital Spend against the annual target set over time

2.3.4. Operational Budget Spend

Over the past period, the unpredictability of load shedding has made budgeting extremely challenging. With bulk purchases accounting for 70% of our regulated expenditure, this has had a significant impact on our overall expenditure. Load shedding and partial customer defection have also led to an overall decline in primary energy consumption in kWh. Additionally, customers are increasingly seeking to reduce their reliance on electricity due to above-inflation electricity price hikes. A consistent downward trend of 1.5% in both bulk purchases and sales has been observed over the recent period. A differentiated approach to salary budgeting for vacancies has also been

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

implemented to avoid over-budgeting and placing unnecessary burdens on customers, while still maintaining the required staffing levels. The impact of COVID-19 also contributed to under-expenditure during the 2019/20 and 2020/21 financial years, followed by a recovery in the 2021/22 financial year.

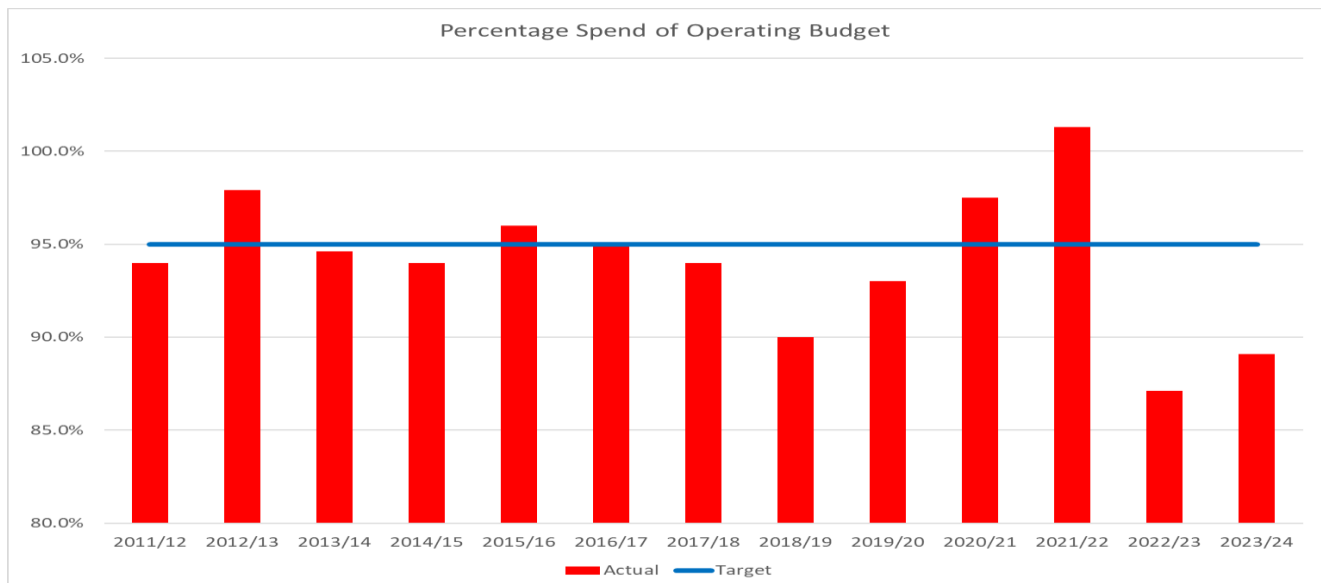


Figure 15: Percentage Operating Budget spent against the annual target set over time

2.3.5. Repairs and Maintenance Spend

The generally strong performance in this expenditure category is a result of the disciplined maintenance activities carried out by the depots. The establishment of an Enterprise Asset Management branch has significantly helped drive the metrics that promote better maintenance practices, as well as measure and monitor them for more effective management of plant and equipment. This also informs capital investment needs, particularly based on the age and condition of the equipment. Although budgeting in this category has been challenging due to efforts to limit tariff increases, the electricity utility faces additional pressure from the widespread theft and vandalism of equipment. This means that existing funding must be re-prioritised for the repair or complete replacement of equipment damaged by vandalism. The impact of COVID-19 also contributed to under-expenditure during the 2019/20 and 2020/21 financial years, but there was a recovery in the 2021/22 and 2022/23 financial years.

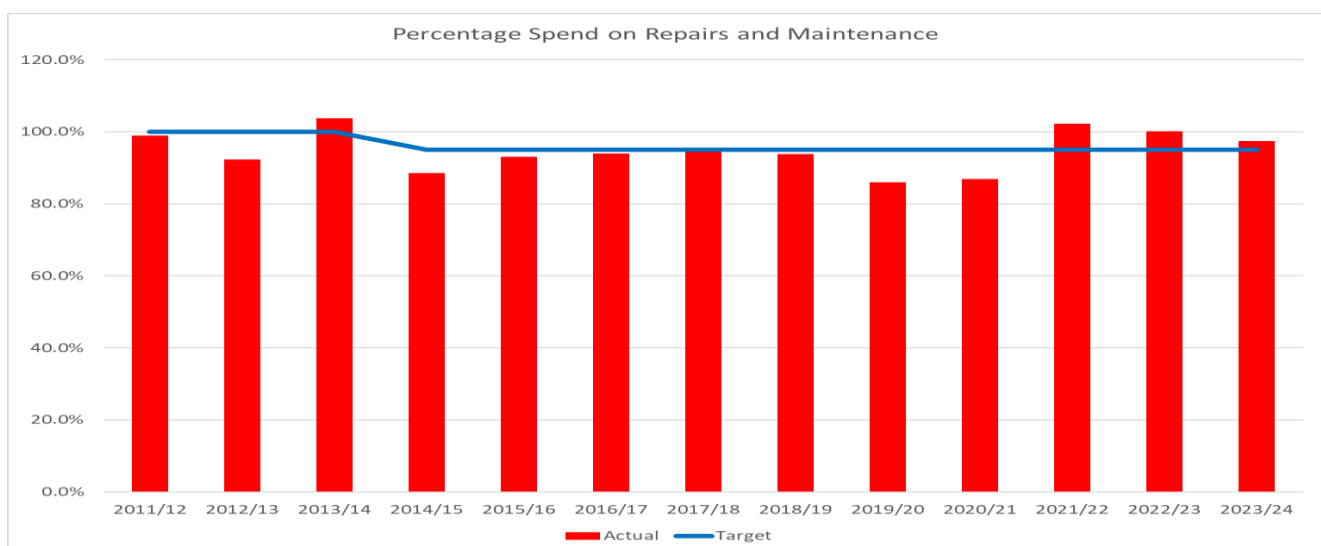


Figure 16: Percentage of the repairs and maintenance budget spent against the annual target set over time

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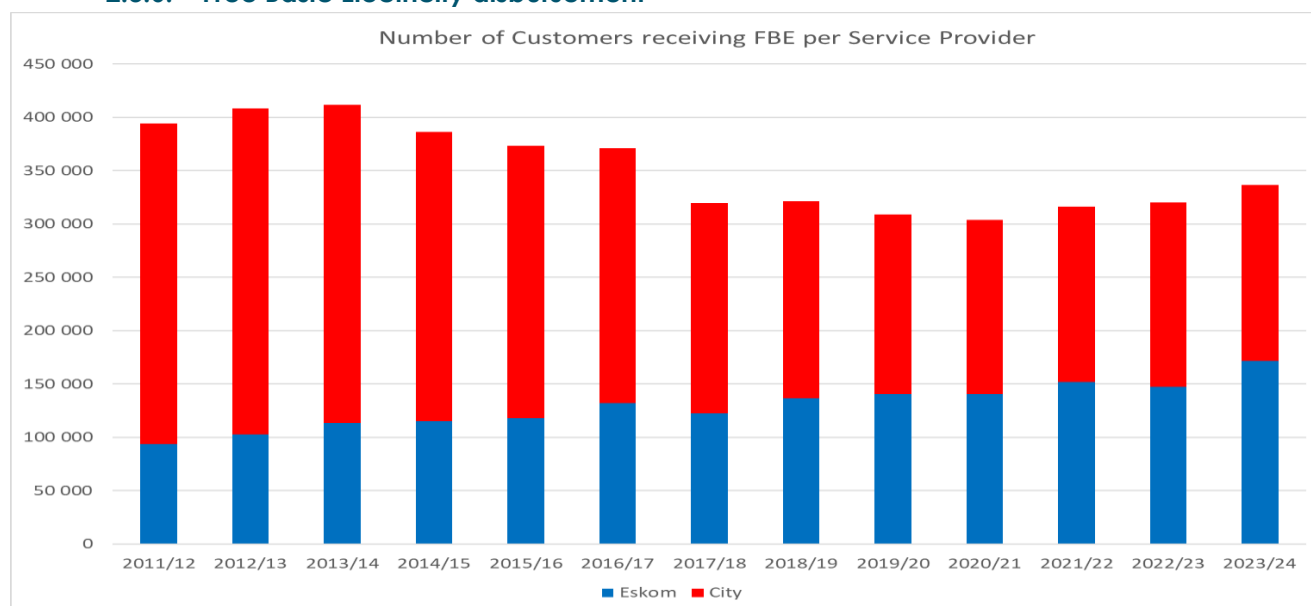
2.3.6. Free Basic Electricity disbursement

Figure 17: Number of customers who receive FBE annually in Eskom and City Supplied Areas

Tariffs have changed over the years, hence shifts in customers across tariffs. The thresholds and qualifying criteria for receiving FBE have also evolved, leading to fluctuations in customer numbers over time.

- Before the 2010/11 financial year (1 Jul-30 Jun), any household using less than 400kWh per month received 50kWh free each month.
- In 2010/11, the threshold was raised so that any household using less than 450kWh per month received 50kWh free, hence the rapid increase in FBE customers shown from 2011 calendar year onwards.
- From 2013/14, households using less than 250 kWh per month received 60 kWh free, while those using between 250 and 450 kWh per month received 25 kWh free.

The initial criteria, based solely on consumption, allowed even mid-and high-income households to qualify for FBE if they were efficient in their electricity use by using less than 400 or 450 kWh per month. To address this, the City introduced additional qualifying criteria from 2016/17, including a property valuation limit of less than or equal to R500 000. These more targeted policies curbed subsidy growth, making the assistance programme more sustainable. Despite this, low-income urbanisation and continued electrification has driven a steady increase in FBE recipients over the past 4 years. Customers in some low-income suburbs automatically qualify for FBE, while others need to apply. To raise awareness about the criteria and application process, the City conducts annual roadshows. The recent decrease in FBE customer numbers reflects the impact of these updated criteria.

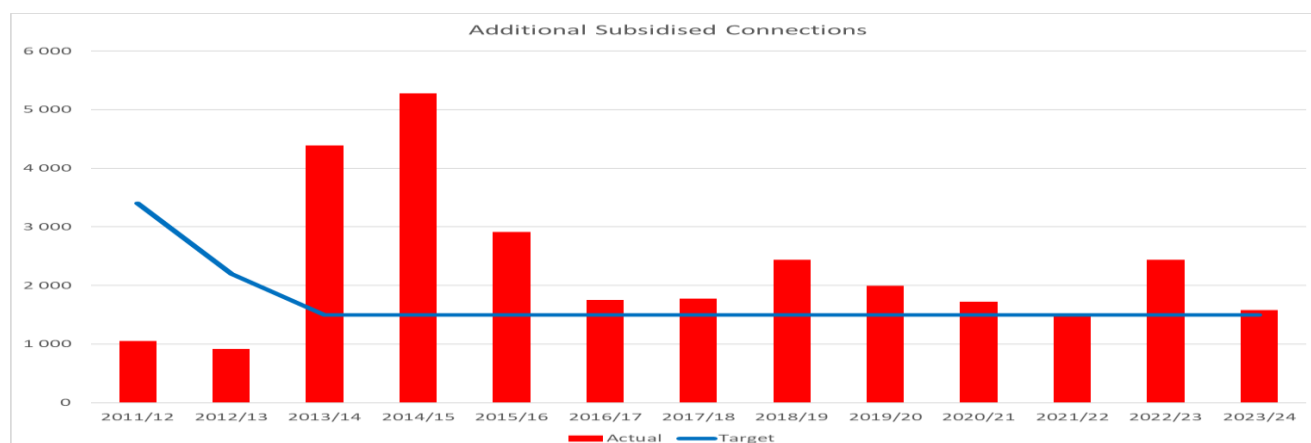


Figure 18: Number of additional service connections undertaken annually for subsidised customers.

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

Figure 18: Number of additional service connections undertaken annually for subsidised customers. indicates the number of additional service connections undertaken annually for subsidised customers. The target for this customer category is 1500. The ability to provide these connections is dependent on the land parcel conditions where an informal settlement is based and dependent upon the human settlements housing pipeline in City Supply Areas.

The City receives a request for electrification, which is then followed by an Electrification Feasibility Assessment. If the Informal Settlement is deemed electrifiable, a beneficiary list is sourced, the project is initiated, and it is added to the Project Schedule. If the Informal Settlement is considered un-electrifiable (located on wetland, close to a servitude, unstable land, no permission from landowner) the potential beneficiaries are encouraged to relocate to land that is suitable for electrification. If the area is electrifiable but requires intervention, the City's electricity utility engages various internal and external stakeholders to address permissions or overcome obstacles necessary for providing safe and legal electrification. However, this remains a lengthy process and falls outside of the electricity utility's control.

2.4. Operational Performance Trends

2.4.1. Electricity Supply and Purchases

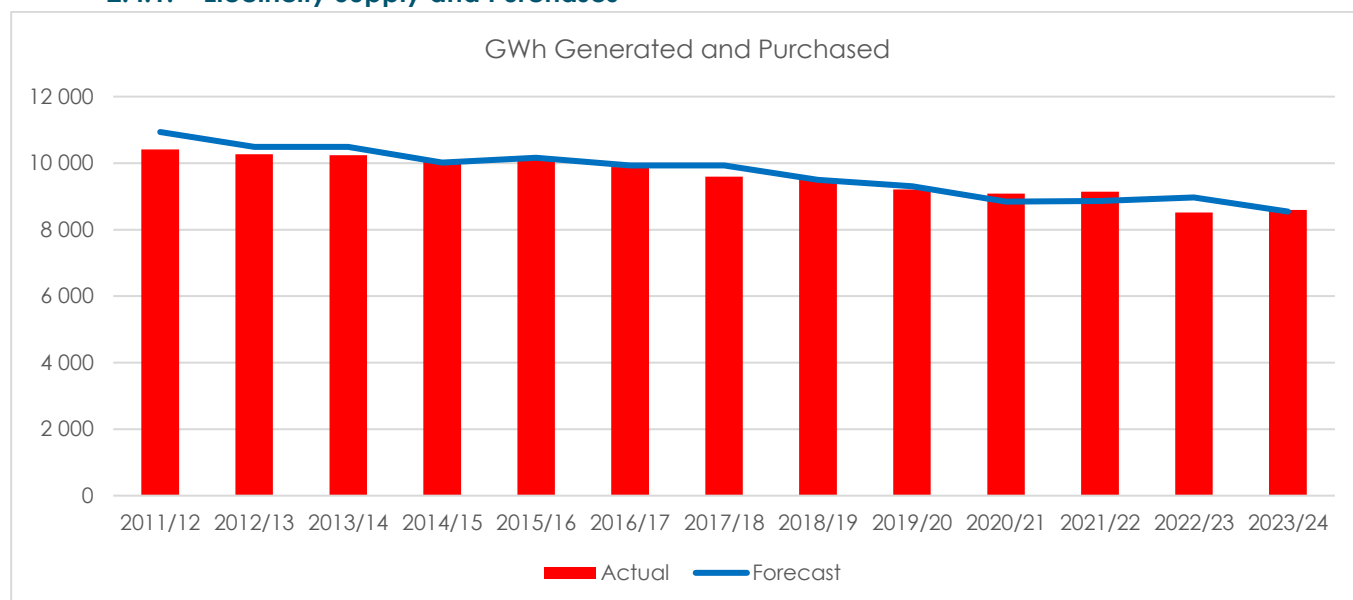


Figure 19: the amount of electricity purchased as well as generated by the City of Cape Town.

Figure 19 shows the amount of electricity purchased as well as generated by the City of Cape Town. The overall demand for electricity from the City utility is decreasing so the amount of energy purchased has also decreased. This is driven by the increase in energy efficiency and, increasingly so, the installation of small-scale embedded generation. This is expected to increase with the increase in wheeling and market participation by larger customers.

2.4.2. Load-shedding mitigation

The City of Cape Town has been able to use the Steenbras Pump Hydro Station as a dispatchable power supply by reserving units for load-shedding response. This means that the City has been able to mitigate up to two stages of load-shedding at times and limit the impact on residents and the economy. This is part of the broader Load-shedding mitigation strategy outlined in the Energy Strategy.

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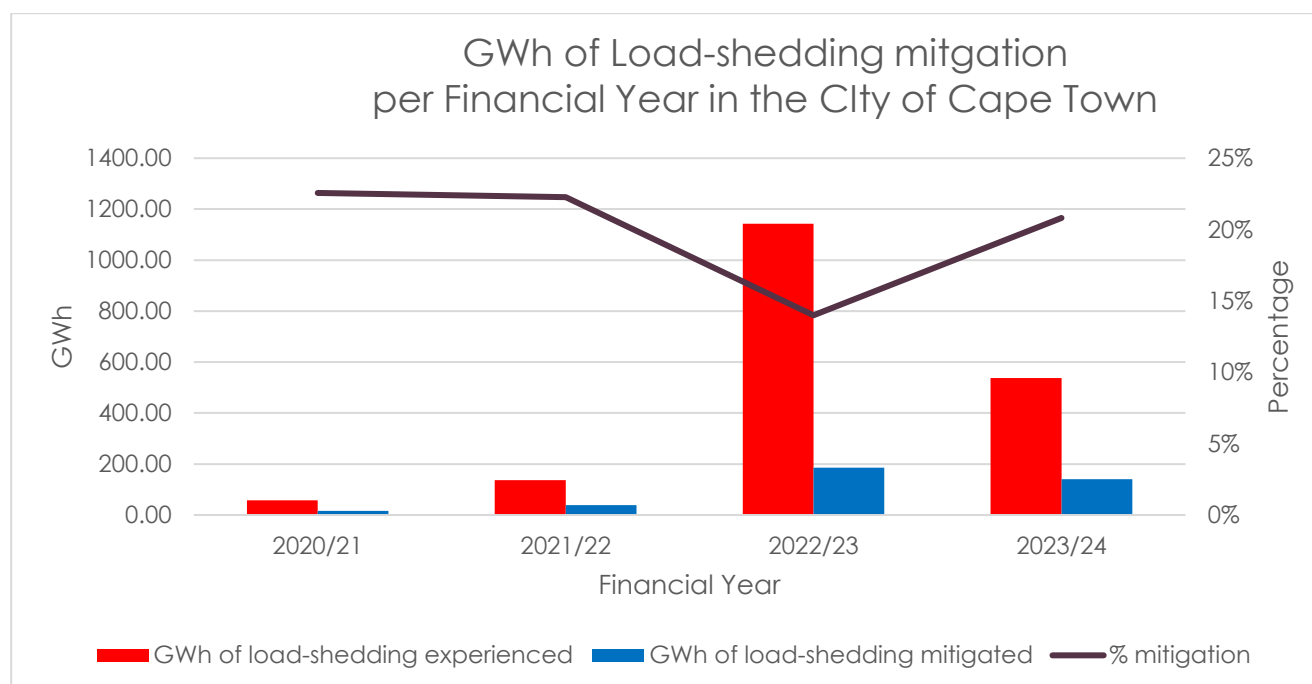


Figure 20: A comparison of the GWh of load-shedding mitigated by the City's interventions against the remaining energy shed.

2.4.3. Maximum Load

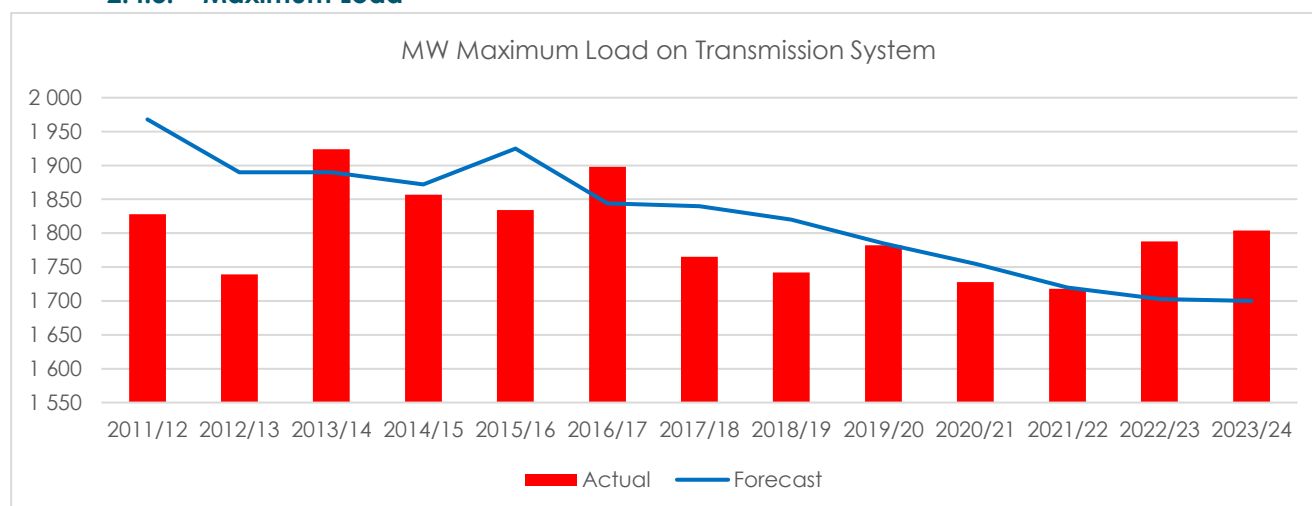


Figure 21: Maximum Load on Transmission System - Notified Maximum Demand (MW)

Maximum demand has decreased primarily due to energy efficiency and, in the more recent years, the escalated frequency and severity of load shedding, along with the resultant economic downturn. The City experiences long and wet winters, where energy peak demand is dominated by residential customers, peaking daily at night and overall in winter. It is therefore expected that there will not be much more of a decrease as maximum demand is driven by peak energy demand when PV-generated electricity is not available. This is likely to stay the case until there is a larger penetration of batteries.

2.4.4. Service Standards

The City's electricity utility has a dedicated Service Connections team to respond to service new customers or changes to a customer's connection. The target of 95% for both of the datasets represented in Figure 22 and Figure 23 below have not been met due to the significant increase in service connection requests from SSEG customers. The SSEG requests are managed by the same team as new service connection requests so, this team has experienced an exponential increase in workload, resulting in staff capacity constraints. To mitigate this, the City has invested in an online

Annexure A: Electricity & Energy Trading Services Reform Strategy – City of Cape Town

application system that is linked to the SAP billing system for both SSEG and now new service connection requests. The achievement of this target has also been hindered by the slow response time from customers where new information is required, submitted information must be corrected, or payments must be made.

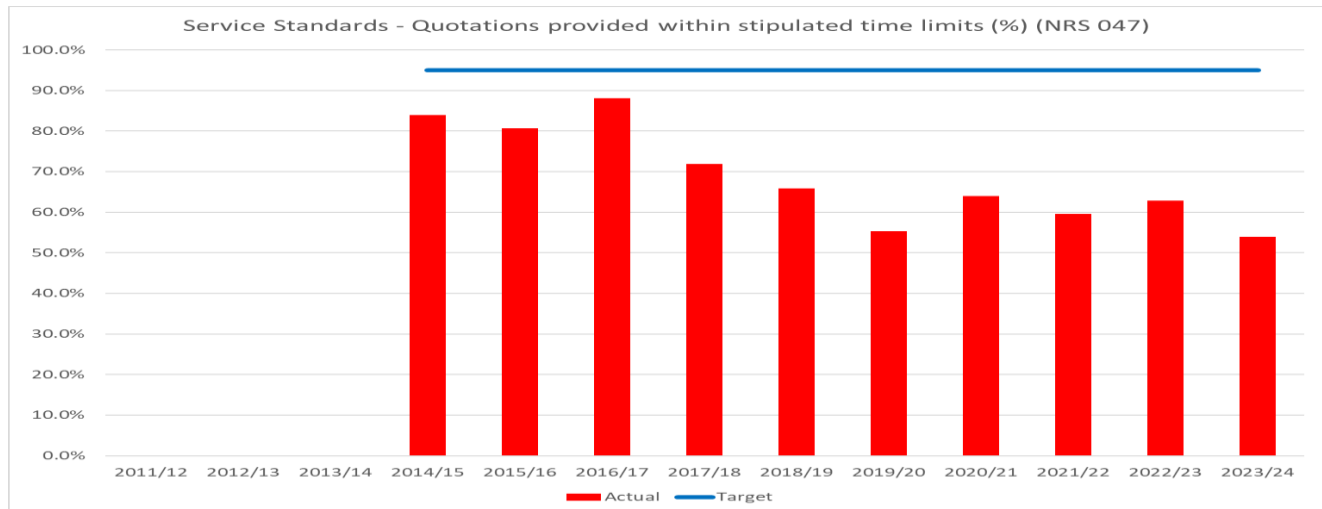


Figure 22: Percentage of Quotations provide din the stipulated time periods

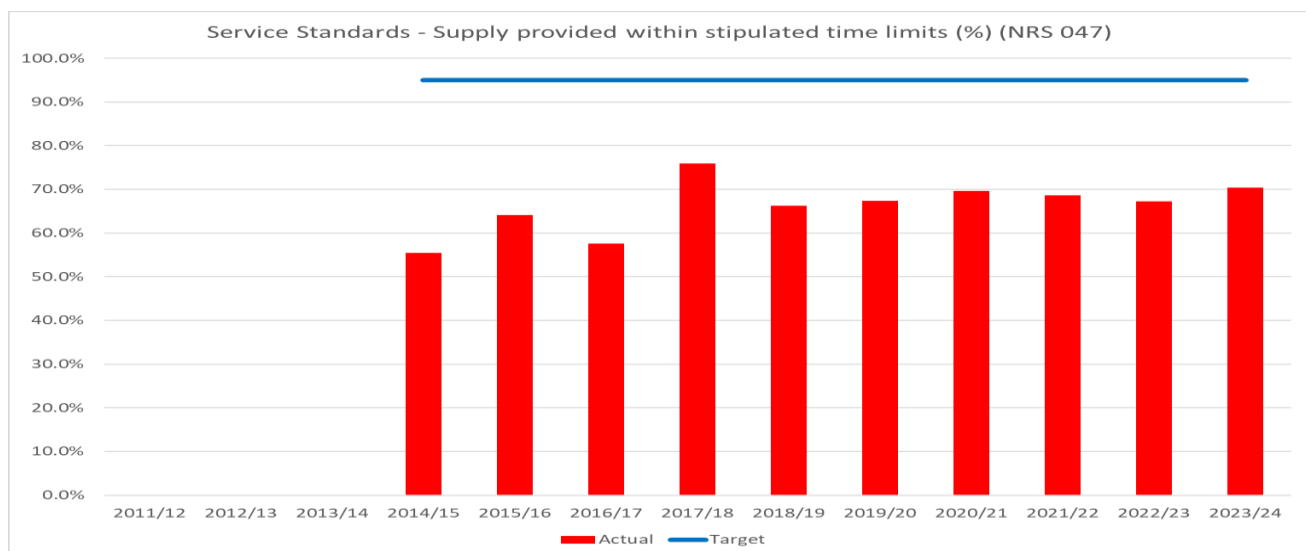


Figure 23: Electricity Supply provided to customers within the stipulated time limits.

2.4.5. Approved SSEG Installations

Figure 24 and Figure 25 below shows the significant increase in both the number of approved embedded generators in Cape Town and the capacity. The vast majority of these systems are very small residential systems, with commercial systems making up a smaller number but a great share of the overall capacity. Load-shedding and the reduction in the cost of technology has resulted in significant customer-driven growth of small-scale embedded generation.

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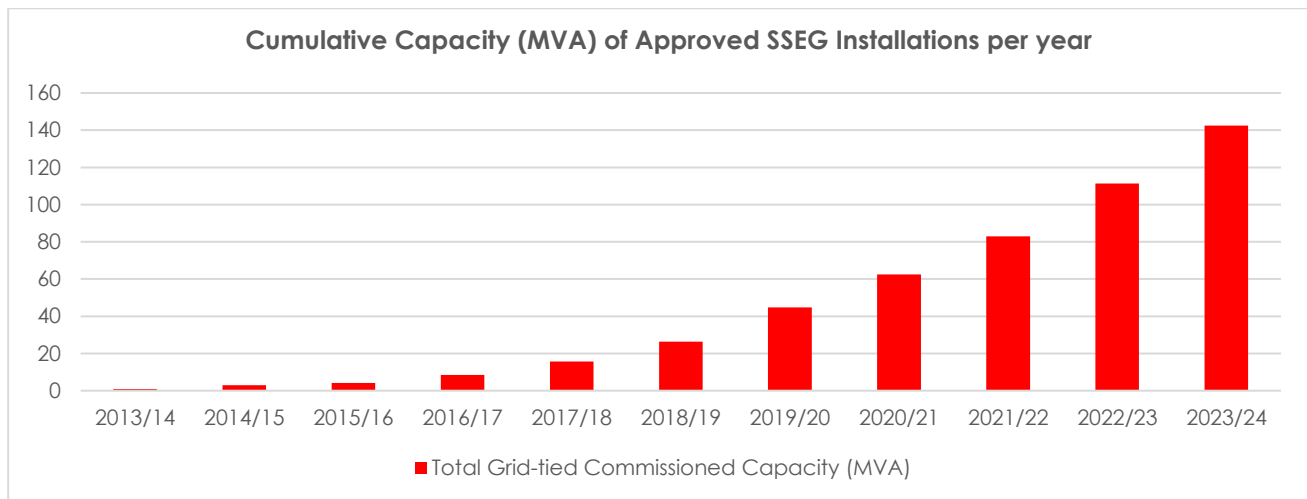


Figure 24: Cumulative Capacity (MVA) of Approved SSEG Installations per year

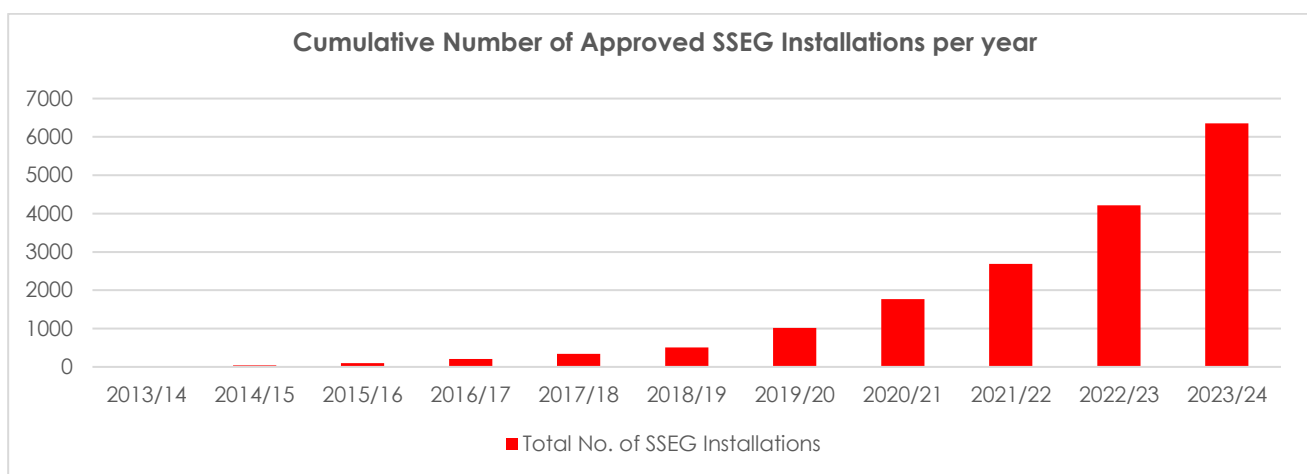


Figure 25: Cumulative Number of Approved SSEG Installations per year

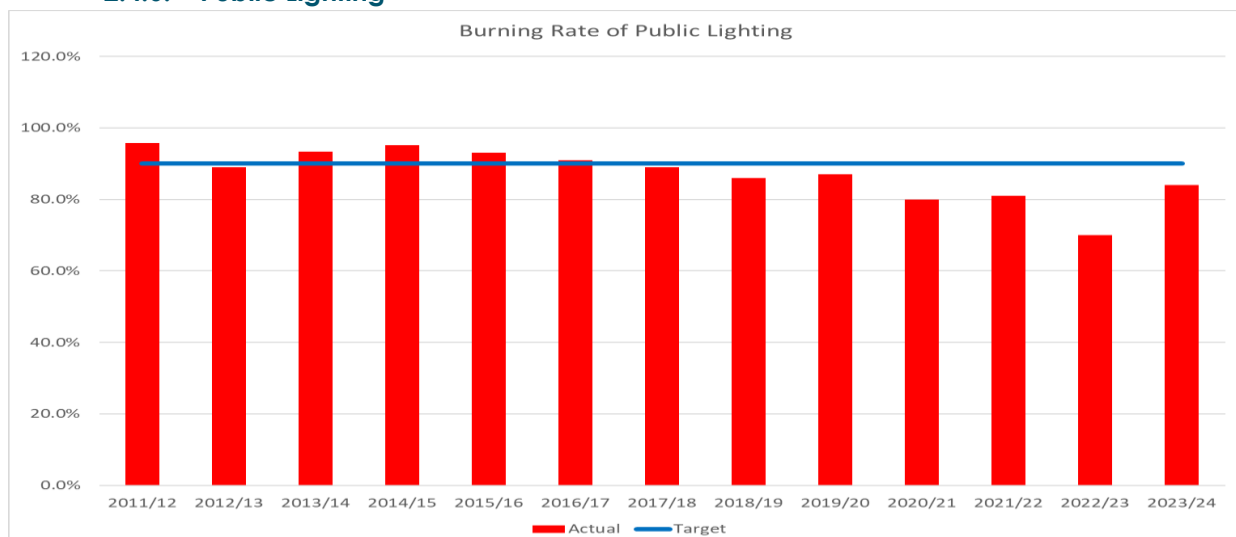
2.4.6. Public Lighting

Figure 26: Percentage burn rate of public lighting

The City installs public lighting in both City and Eskom Supply Areas. This lighting is for roads, public spaces, and informal settlements. However, public lighting networks are currently under significant threat from increased theft and vandalism. As with other areas of business where this is a particular issue, the City cannot address it alone and requires co-operation from communities and other law enforcement.

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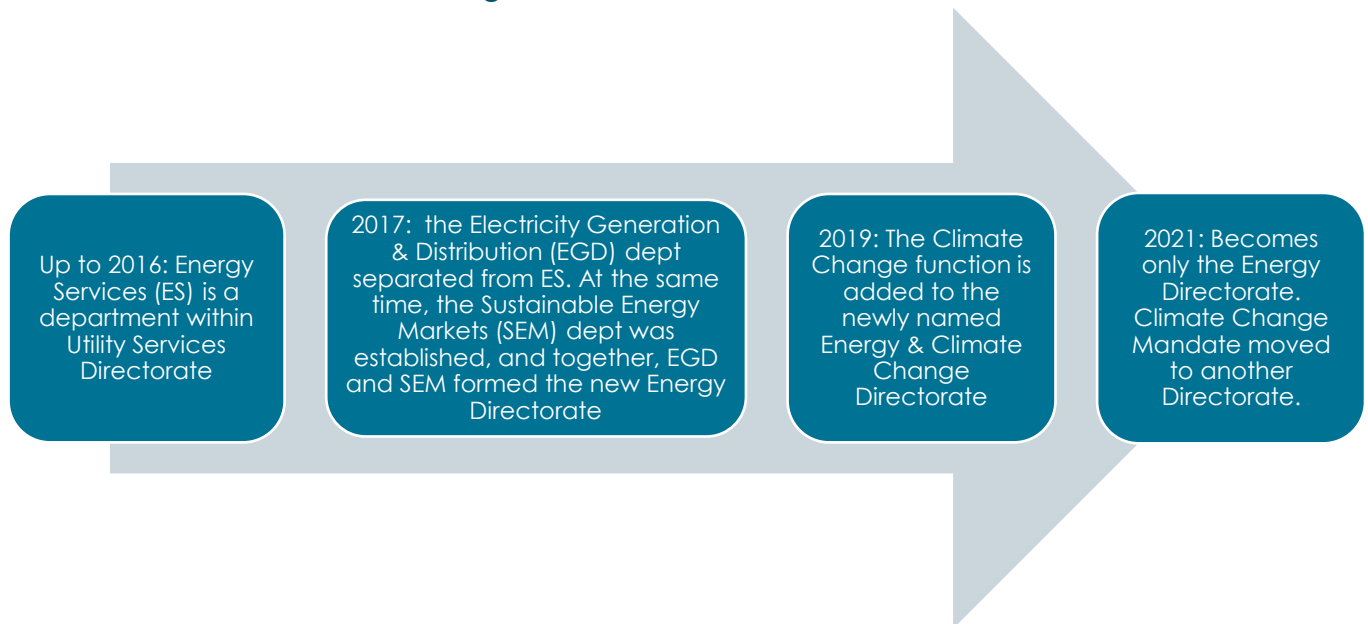
2.5. Current Institutional Arrangements and Governance

Figure 27: Evolution of institutional arrangements of Energy Directorate.

Figure 27 shows how the institutional arrangements of the Energy Directorate have reformed over time. Until 2016, Water, Energy and Solid Waste Management were in one Utility Services Directorate, with Energy separated out as its own Directorate in 2017. This strengthened and increased the accountability of the Executive Director for the Energy Services in the City of Cape Town. The Energy Directorate was then further strengthened as a trading service in 2022 when the climate change function was extracted and centralised.

The City's current macro structure is presented in Figure 28 to highlight the position of the electricity utility in the context of the City. The macro structure indicates the accountability held by the Executive Director: Energy that reports directly to the City Manager (as indicated in red).

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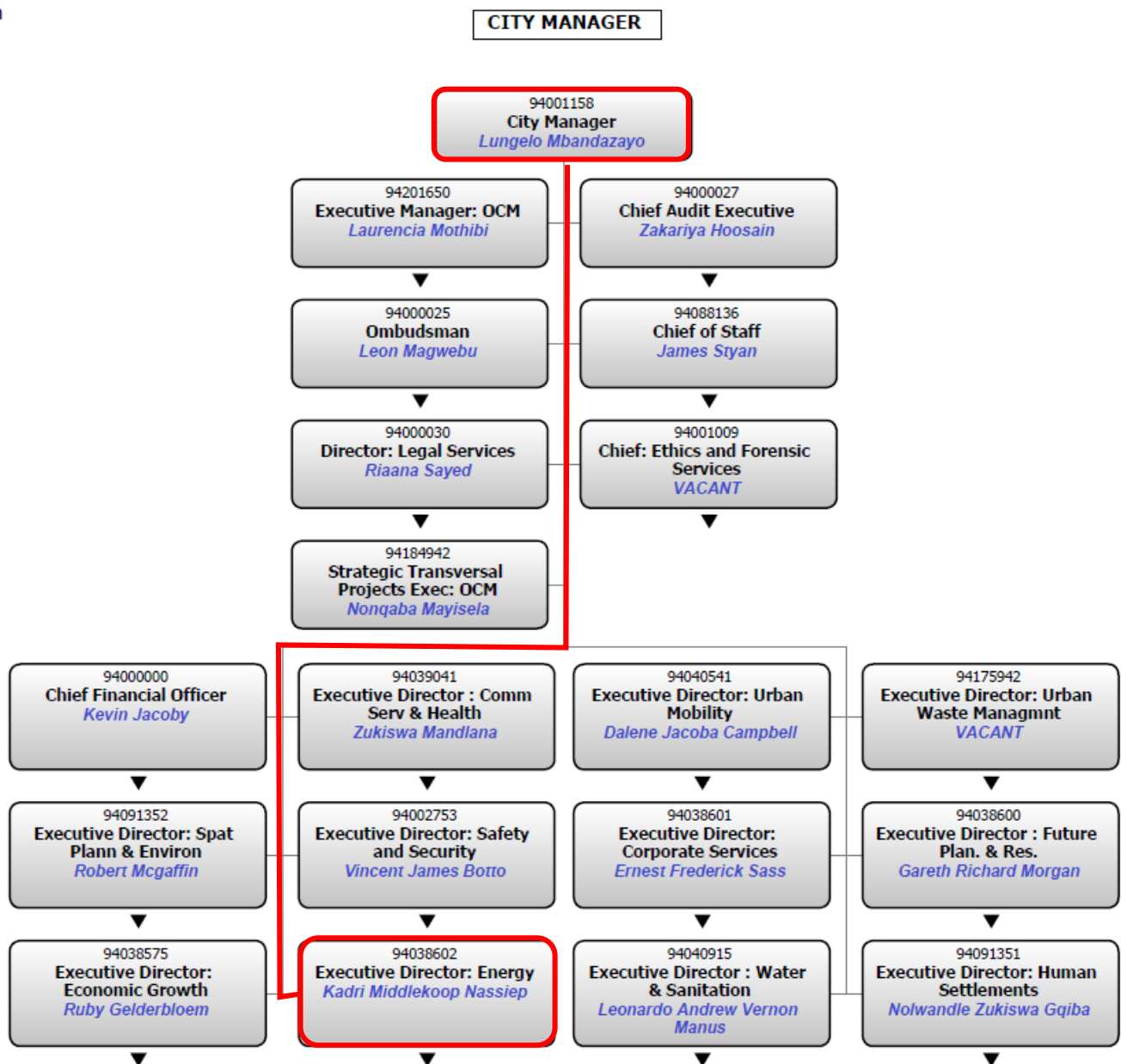


Figure 28: City Macro Organogram (Source: adapted from 2024/25 review IDP 2022-2027)

The Energy Directorate, also referred to as the electricity utility in this document, is comprised of two departments: Sustainable Energy Markets (SEM) and Electricity Generation and Distribution (EGD) with key employment metrics shown in the table below.

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TOTAL STAFF	2 824
NUMBER OF POSITIONS FILLED	2 546
NUMBER OF VACANCIES	280
PERCENTAGE COMPLIANCE/ADHERENCE TO EE STANDARDS	93,82%

Directorate organogram



Figure 29: Extract from 23/25 SDBIP report with key HR statistics for the Energy Directorate's workforce.

2.5.1. Governance of energy decision-making

This section outlines the key processes and policies that are applicable to the whole City and the bespoke governance structures for the Energy Directorate to govern decision-making related to investment and operations.

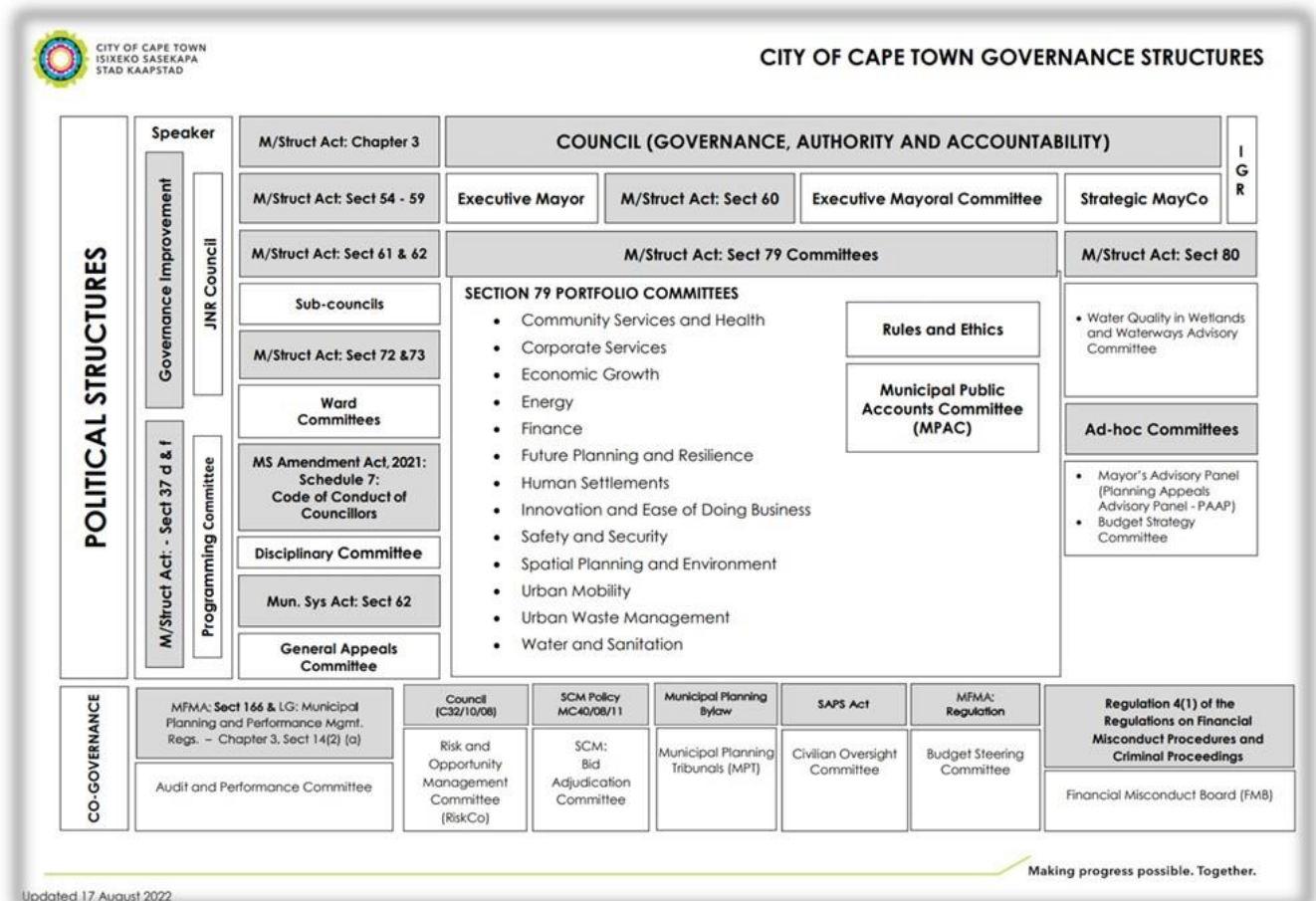


Figure 30: The City of Cape Town's governance structures

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The City's Electricity Utility is part of the local government structure, which requires the overall structure to adhere to provincial and national government legislation. A simplified depiction of the City of Cape Town's overall governance structure is displayed in Figure 30 above, and Energy forms part of one of the portfolio committees, which is subordinate to many other structures within local government. Although this is not a barrier to utility reform, it creates additional complexity as the Energy Directorate forms part of a larger service delivery mandate.

The Energy Strategy

The City of Cape Town has developed and adopted a long term Energy Strategy with a wide-reaching scope to ensure a cost-effective and cohesive approach to overcoming the challenges and taking hold of the opportunities of the energy transition currently underway. This includes a focus on energy security; power utility reform; investment in the distribution grid of the future; using energy efficiently; and alleviating energy poverty. Importantly, all these focus areas work together to create a strong foundation for economic growth to create jobs and alleviate poverty in the City. The Energy Strategy will be implemented through the development of a detailed Implementation plan that assigns resources (budget and staff) to each programme. Targets and Key Performance Indicators will be refined, monitored and evaluated along with the overall progress on the Energy Strategy implementation as guided by the Performance Management Plan that will also be developed.

Figures 31 and 32 depict the framework of the Energy Strategy and the commitments and enablers, which contribute to achieving more reliable, affordable, and clean energy for Cape Town. The full strategy can be viewed here:

https://resource.capetown.gov.za/documentcentre/Documents/City%20strategies%2C%20plans%20and%20frameworks/Energy_Strategy.pdf

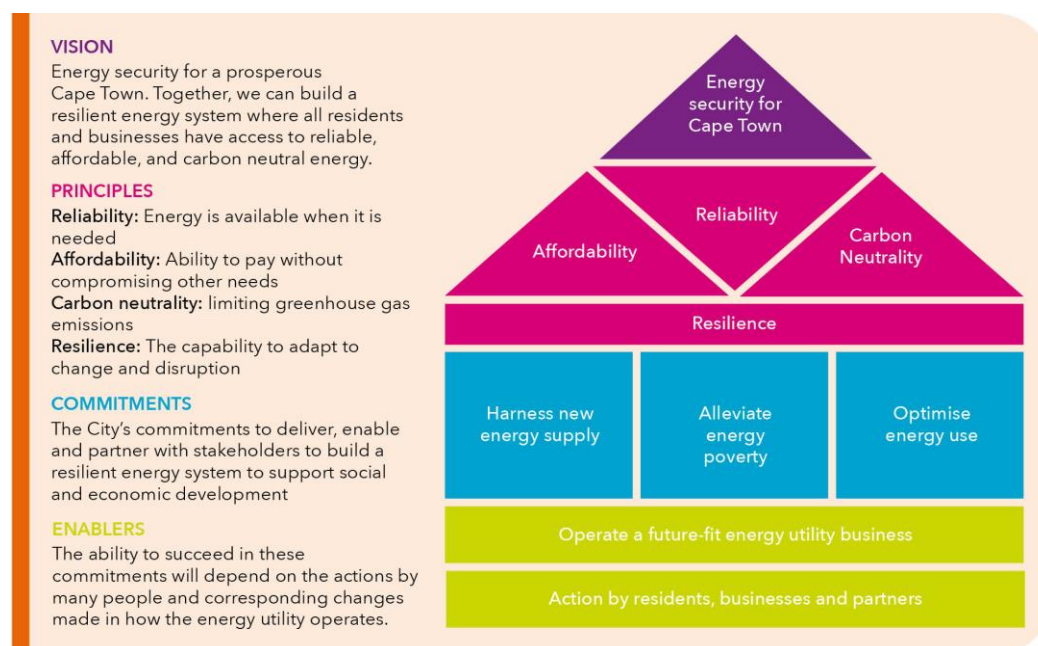


Figure 31: Summary of the City of Cape Town's Energy Strategy

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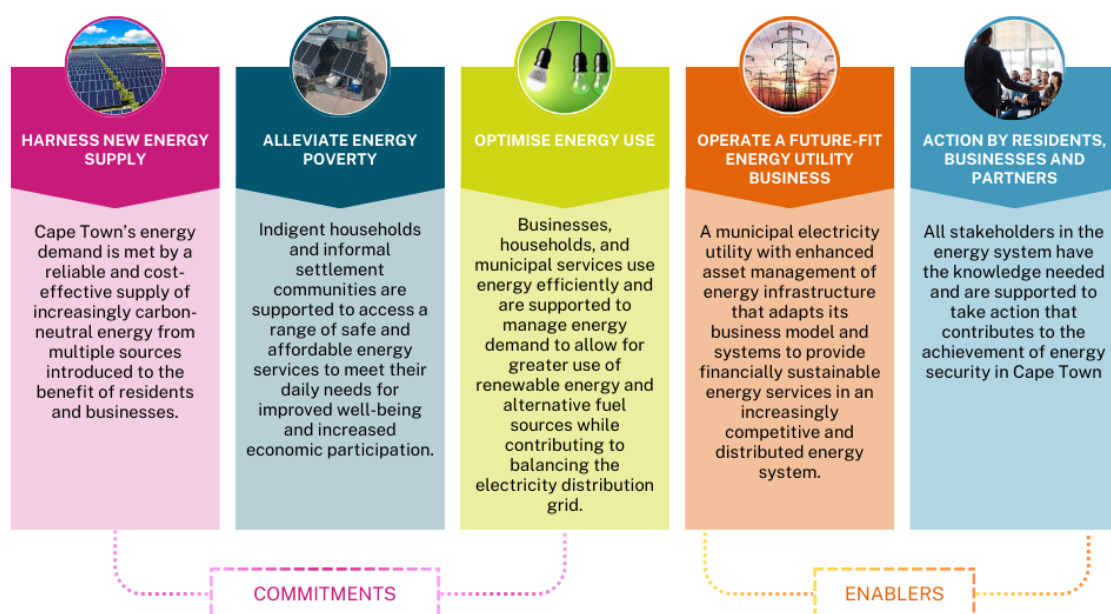


Figure 32: Summary of the Commitments and Enablers from the City of Cape Town's Energy Strategy.

IDP (2022 – 2027)

The Integrated Development Plan (IDP) is the central strategy of the City of Cape Town. The IDP communicates to residents, businesses, and investors the City's long-term vision, and how the City plans to achieve it. It is required in terms of the Municipal Systems Act 32 of 2000, which defines the IDP as a municipality's principal strategic planning instrument that guides all municipal planning. The City's vision is for Cape Town to be a City of Hope for all – a prosperous, inclusive, and healthy city where people can see their hopes of a better future for themselves, their children, and their community become a reality. The following diagram shows the focus areas of the City over the next five years. The City will focus on six priorities, the most important of which is economic growth to reduce poverty. These priorities will rest on three foundations essential to realise 'A City of Hope'.

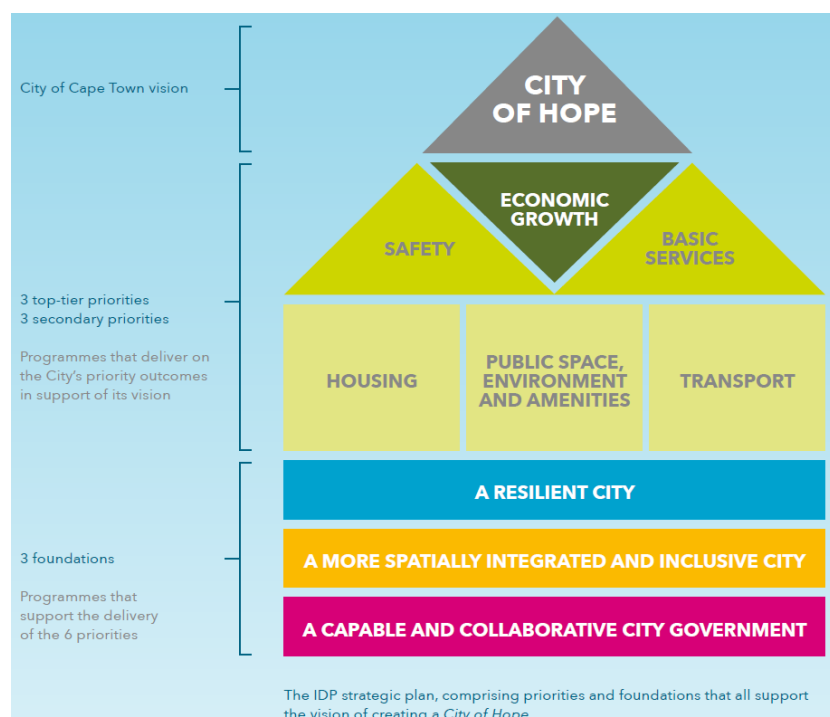


Figure 33: A summary diagram from the City of Cape Town's Integrated Development Plan 2022 - 2027

The City's five-year implementation plan is informed by 16 objectives, which describe what success looks like in realising the vision of a City of Hope. The programmes and initiatives/projects under each

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of these objectives are how the City intends to contribute towards these objectives. The Energy directorate is a key role player in five of these programmes supporting three objectives of the IDP.

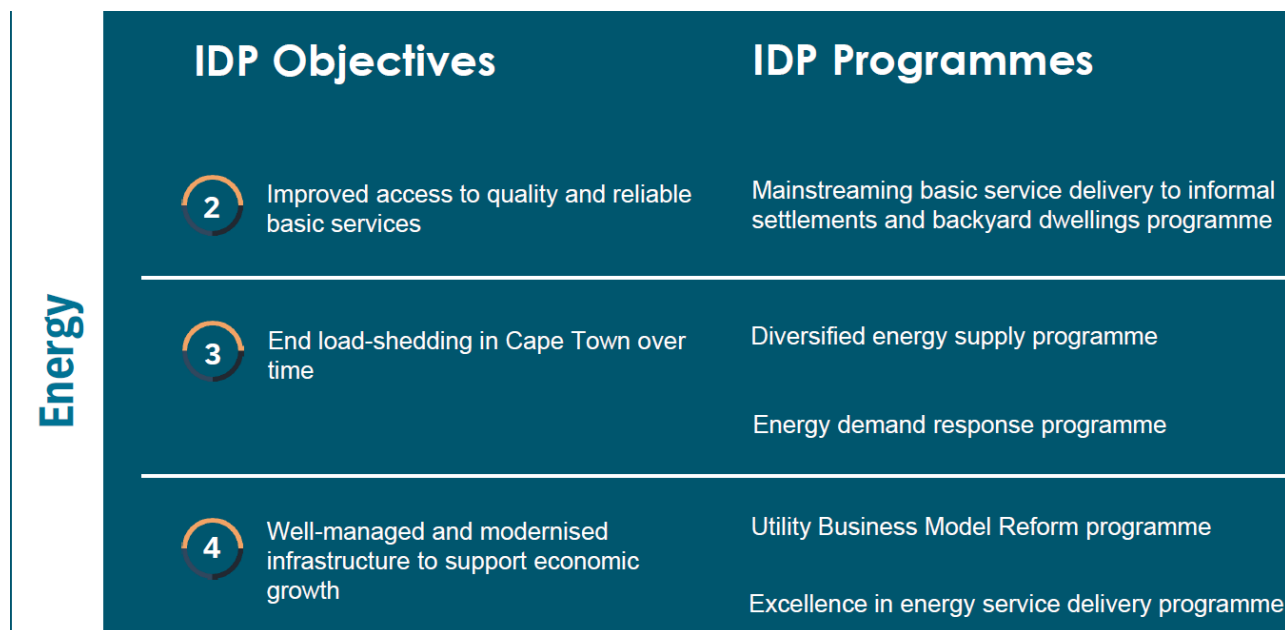


Figure 34: IDP programmes in which the Energy Directorate is involved.

Governance for Project Development

The City of Cape Town has implemented a robust structure for the governance of programmes and projects to ensure alignment with strategic objectives and service priorities.



Figure 35: Diagram representing the processes and systems in place in the City of Cape Town for governance of portfolios and projects

The Integrated Development Plan (IDP) provides the overarching strategic framework for the City. The Strategic Management Framework (SMF), initiated in 2017, aims to integrate strategic planning activities across the City to enable integrated decision-making and strategy-led budgeting. It introduces four corporate stage gates: Strategy review, Operational review, Capital review, and Budget planning review, facilitating progressive strategy development.

The annual budget cycle operates within an established long-term planning context. Key strategic imperatives extend beyond the standard MTREF 3-year horizon, necessitating integrated longer-term planning across sectors. This informs prioritisation and trade-off discussions, ensuring alignment with long-term objectives.

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Sector Planning

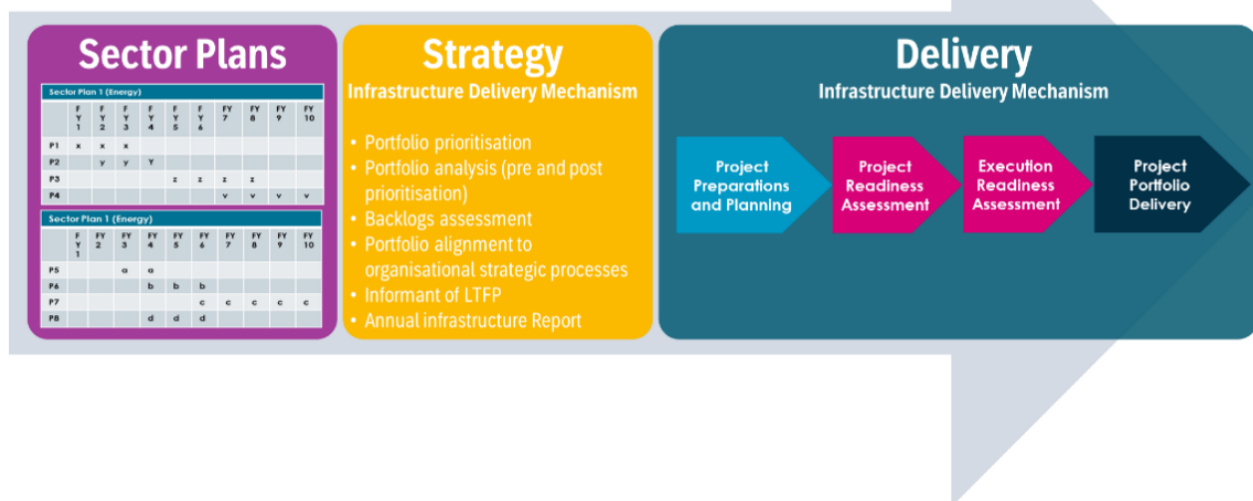


Figure 36: Sector planning towards an Infrastructure Delivery Mechanism, as described by the City's Stage Gate Review Guideline (June 2024)

Sector planning plays a vital role in the City's project preparation and delivery processes. These sector plans are developed as part of a ten-year strategic planning initiative and serve as a foundational input into project preparation. Through established planning assumptions (established by Strategy and Policy), these sector plans enable capacity planning, provide opportunities for IDP review, annual planning and Strategic Management Framework (SMF) input, and ensure portfolio alignment with the City's strategy. This also informs the Long-Term Financial Plan (LTFP) and the Annual Infrastructure Report, ensuring that project preparation starts well ahead of time and is managed accordingly.

Sector planning ensures the City prepares viable capital pipelines, considering future operating models, skills requirements, land availability, and financial sustainability.

Figure 36 illustrates how sector plans transition into project preparation and delivery stages through a funnel approach, allowing for effective project readiness and execution readiness assessments.

Capital Investment Committee

In 2017, a formalised Capital Investment Committee was established within the Energy Directorate to document and record decision-making around capital investments, especially within routine programmes, to enable these to feed into the formal approval processes established within the City.

All capital expenditure occurs as part of an approved major project or project (unique WBS), or approved programmes and routine programmes (bulk votes).

The CIC, established by the Director: Electricity Generation & Distribution assists in evaluating and making recommendations on projects, programmes, and routine programmes as well as requests for expenditure within both these programmes. It reviews requests for expenditure submitted for approval incorporation into the Department's capital programme. The procedure to get project approval from CIC is documented in the Capital Investment Approval Procedure (EBZA12).

Project, Programme and Portfolio Management

Each project within the City has a clearly defined lifecycle with a specific start and end, focusing on delivering the right outputs within defined scope, time and cost constraints, while also prioritising stakeholder satisfaction. This lifecycle ensures that projects are executed effectively; meeting the

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immediate goals that contribute to the wider objectives of the programmes and portfolios, they are part of. The standard lifecycle for a project is depicted below.

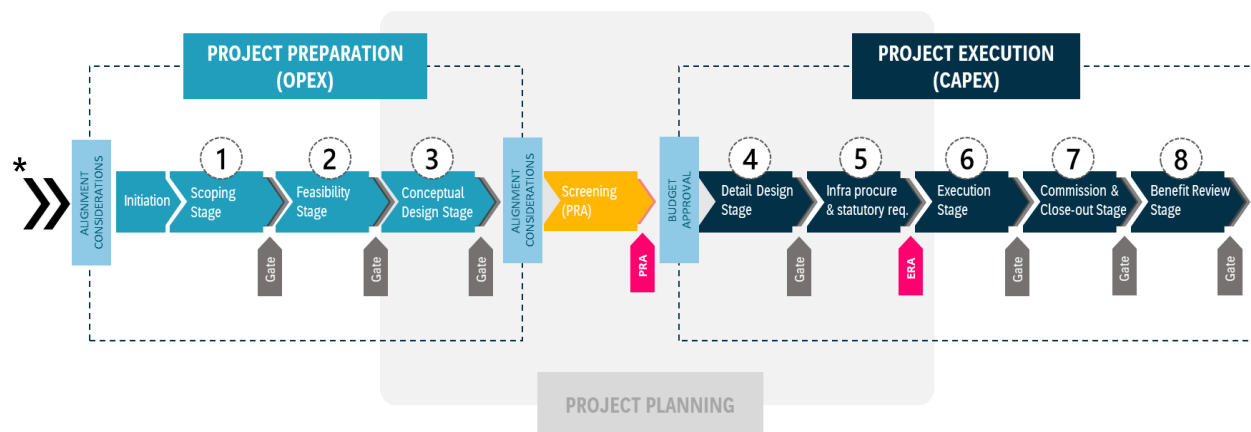


Figure 37: CCT Project Lifecycle

Projects vary significantly in complexity and value and as such do not all require the same level of governance. A “right-size governance” or “fit for purpose” approach seeks to tailor the project lifecycle, and by implication the required project governance, based on the characteristics of the individual project. For this purpose, a project complexity model has been developed and built into SAP PPM that accounts for the project cost factor and the Implementation complexity factor. The project complexity model informs the appropriate lifecycle for a project and categorises a project as large, medium, and small or a purchase item. Based on its lifecycle, projects may be exempt from passing through all the stages that are shown in the project lifecycle.

The project management process employs a structured framework comprising five process groups that guide projects from initiation to closure, ensuring successful delivery within defined constraints. These process groups provide a roadmap for effective planning, execution, monitoring and control, promoting consistency and accountability across the City's diverse project portfolio.

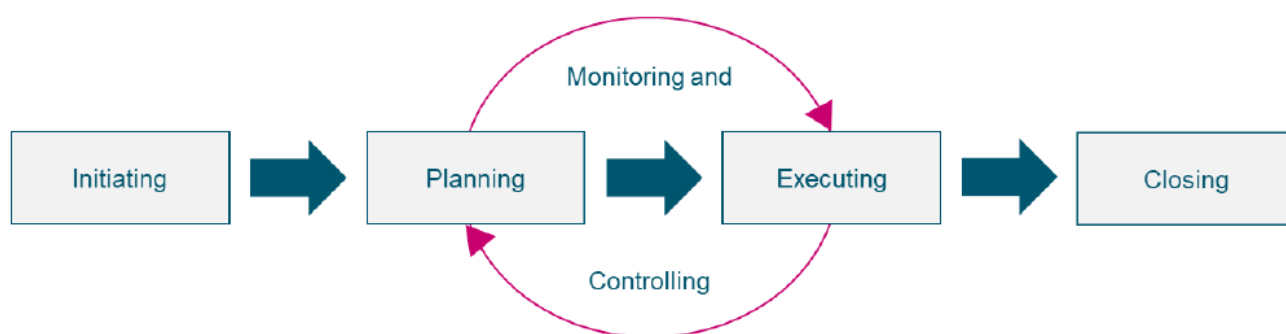


Figure 38: Project management process [Source: Project, Programme and Portfolio Management: Operating Model, June 2024]

Stage Gate Reviews

In 2019, the City of Cape Town introduced the Stage Gate Review process as part of its Organisational Development and Transformation Plan to improve its Project, Programme, and Project Portfolio Management maturity. A 2020 memorandum made this process mandatory for all projects valued at R10 million or more from July 1, 2020. Projects must follow the City's Stage Gate Guideline and be approved by the Stage Gate Committee before submission to the Mayoral Committee or Council.

The process is aligned with the Local Government Framework for Infrastructure Delivery and Procurement Management (LGFIDPM), adopted in April 2021 as a best practice guideline. This

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framework sets governance standards to ensure effective infrastructure delivery and procurement management, focusing on community priorities and project benefits.

Stage Gate Reviews provide a structured assessment at key project stages to control quality, manage risks, and ensure performance. The process functions as an independent assurance mechanism, using set criteria to determine if projects can proceed through their lifecycle stages.

Factors considered to establish the project and investment pipeline

Investments made into the grid are triggered predominantly by equipment age and or condition, customer demand, growth in system loading, staff and public safety (OHS Act compliance), licence compliance (South African Grid Code), and a routine risk assessment.

As far as possible, investments and interventions in the energy system should contribute to three goals aligned with the energy vision, but it is understood that due to context and financial constraints, not everything can be done at once. Currently, due to the energy supply crisis, pursuing a reliable supply of energy is the primary driver for investments as the energy system fails without this. Then, within the context of a sufficiently reliable energy supply, more affordable and carbon-neutral energy become the primary drivers of investment decisions in the energy system. However, short-term priorities must be implemented in such a way as to achieve, and not undermine, longer-term objectives. The Energy Directorate will follow the framework for prioritisation of investment and interventions as detailed in the Energy Strategy. The strategy aims to do so by outlining three distinct phases of implementation, each with distinct focus areas.

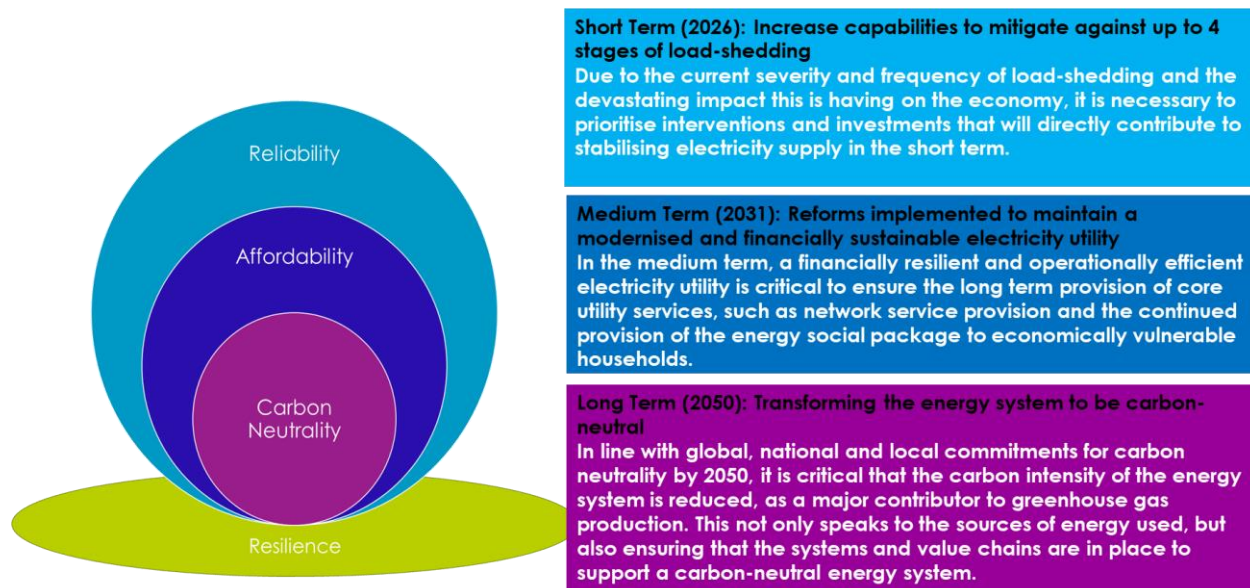


Figure 39: A Framework for Prioritisation of capital interventions during a three-phased approach to implementation (from the Council Approved Energy Strategy)

3. A Future-fit Utility Business

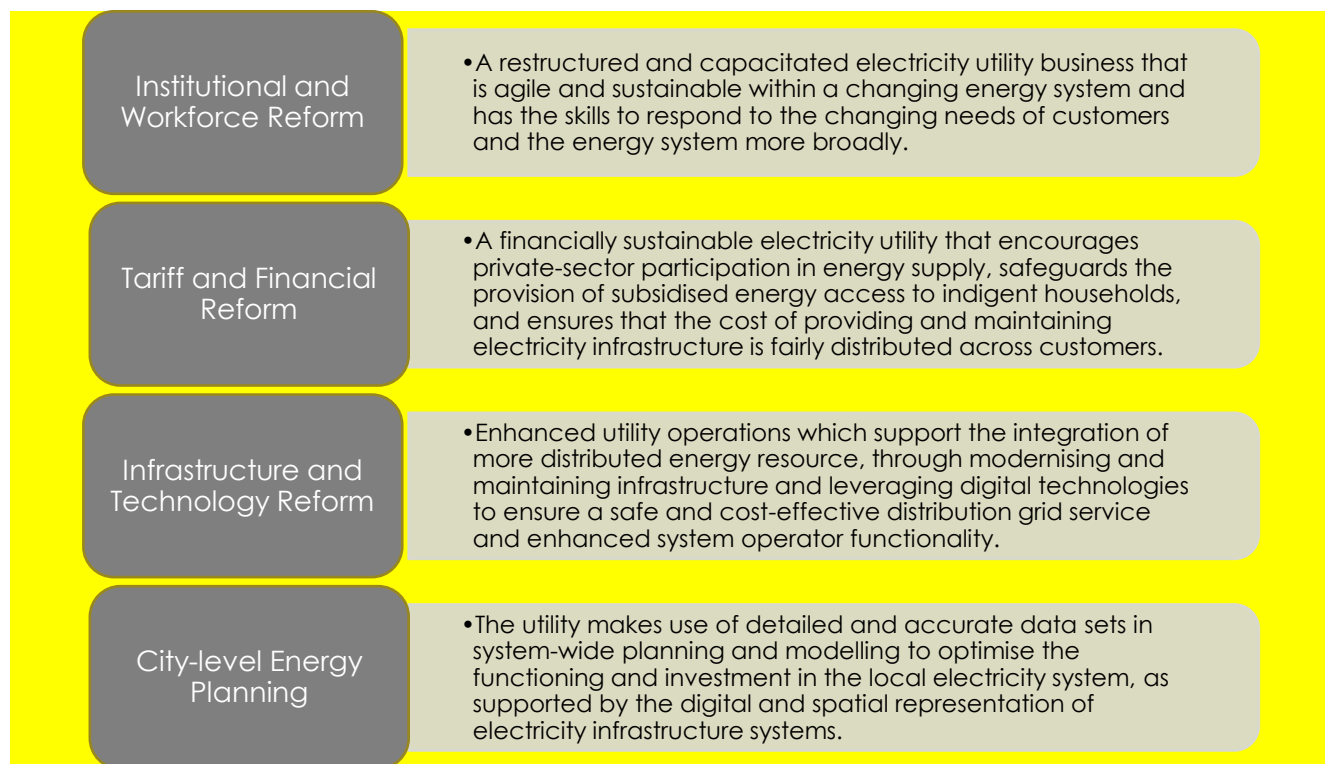
Within the context of the City's broader Energy Strategy, *Our Shared Energy Future 2050* (approved 26 October 2023), the objective to operate a future-fit utility business is an enabler of the three commitments to harness new energy supply, alleviate energy poverty, and optimise energy use. Being an enabler means that action in this area should enhance the City's ability to mitigate risk and harness opportunity across the three commitments to ultimately achieve greater energy security in Cape Town.

The goal is to be a municipal electricity utility with enhanced asset management of energy infrastructure and that adapts its business model and systems to provide financially sustainable energy services in an increasingly competitive and distributed energy system. The objectives of this reform are listed below as implemented through financial, institutional, and organisational reform and the establishment of a single point of accountability and the Energy Directorate as a functional Business Unit:

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- Improve operational efficiency and reduce losses
- Enhance service quality and reliability
- Increase cash revenues and financial sustainability
- Develop a fit-for-purpose organisational structure for electricity trading services

All these areas of reform must work together in order to holistically address the challenges and harness the opportunities available. A summary of the programmes and their objectives in this portion of the City's Energy Strategy is provided below.



4. Overview of the Institutional Reform Roadmap

Electricity utilities have traditionally been vertically integrated across the electricity value chain, from generation to transmission and distribution to retail functions. Over the past few decades, utilities the world over have unbundled their operations in order to enhance financial sustainability, increase transparency and accountability, reduce risk exposure, and increase agility to respond to the changing energy landscape. The National Utility, Eskom, is now undergoing a similar process. For these same reasons, the City is now also seeking to unbundle its three functions of generation, distribution and retail within an appropriate institutional structure.

Furthermore, City staff working in the Electricity Utility must have the skills to address current and new demands being placed on the utility with regard to increased digitisation and more engagement with customers as active participants in the energy system, to name a few. This requires enhanced and new skill sets within the utility.

The City recognises that a reform of its current electricity utility business model is needed to enhance service delivery accountability, enable multiple actors to operate effectively within the energy market, while distributing the cost of upgrading and maintaining the grid fairly across customers. This reform needs to consider the full suite of businesses within the electricity utility; namely generation, distribution and retail. There are, however, a number of functions required of the municipal electricity utility that must be retained through this process of reform:

- Ensuring equitable access to energy, especially through the provision of affordable energy services to indigent households;

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- Ensuring the continued functionality of the electrical grid infrastructure to distribute electricity safely and efficiently throughout the city, both the physical infrastructure and the systems for its operation;
- Retaining the ability to be an electricity supplier of last resort, even in a fully competitive and liberalised generation and retail market.

It is essential that the City continues to perform its constitutional responsibility to distribute electricity to Cape Town, through enhancing service delivery accountability, investing in an administratively efficient government that is financially sustainable. The Energy Strategy focuses on cost-effectiveness, making use of digital technologies to maintain and improve service delivery, and enhancing data collection and analysis capabilities to ensure City resources are used in such a way so as to achieve maximum public benefit.

Three action areas are therefore planned for this programme of institutional and workforce reform:

- **Institutional Review and Optimisation:** Establish the Energy Directorate as a Business Unit with the Executive Director as a Single Point of Accountability for the full municipal energy services value chain. This will require a review of the existing relationship with the Corporate and shared functions held within the City of Cape Town and, where necessary, amendments will be recommended and reviewed to align with this strategic objective. This focus area includes enhancing financial transparency through this process too.
- **Functional Review and Restructuring:** to insure the internal organisation of the functional areas of the energy business are aligned with the services required in a more competitive energy market and changing customer needs.
- **Workforce Skills and Capacity:** Review and analysis of current and future skills and capacity requirements to deliver on functional requirements of a future-fit utility business.

4.1. Institutional Review and Optimisation

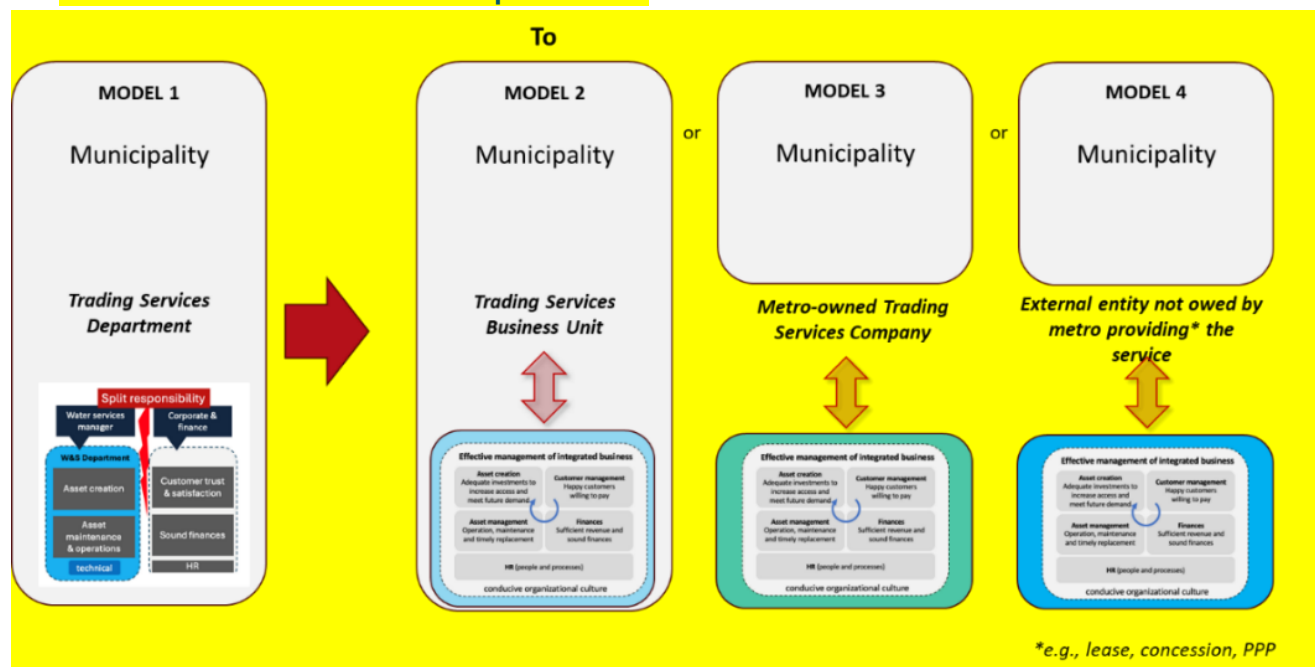


Figure 40: Direction of travel from department to trading service business unit (model 2)(source Guidance Note 3: Institutional arrangements for Turning Around Metro Trading Services)

The strategy of the City of Cape Town is to continue to evolve the Energy Directorate in to Model 2 noted above where Energy is a Business Unit within the Municipality. Some aspects of Model 2 are already in place, as noted below, it is understood that there are opportunities for enhancement to fully establish the directorate as a business unit. This means that the trading service will have an

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explicit financial and institutional relationship with the municipality with a single point of accountability for the full municipal energy services value chain.

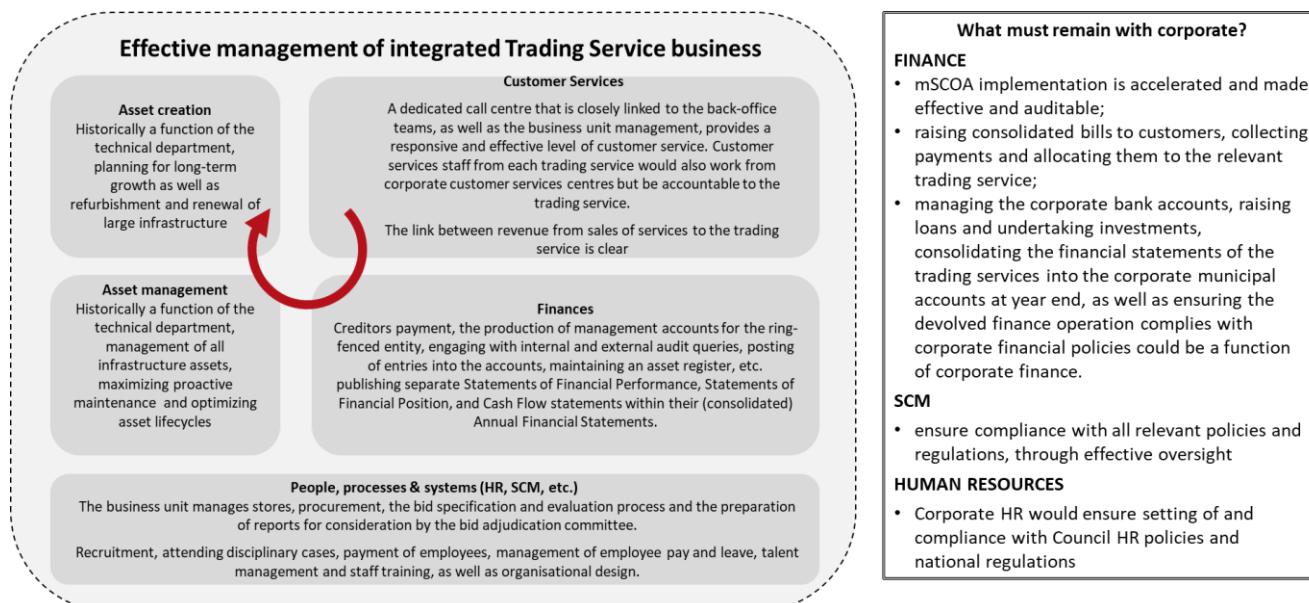


Figure 41: National Treasury's 7-box model

This section applies the seven box model, shown in Figure 41, at a high level with a more detailed version provided in Annexure A1 to the current operations of the Energy Directorate in the City of Cape Town. This assists to identify where functions are shared between the trading service and another Directorate in the City or currently held by a corporate service. The City will then map and review the specific functions that are shared or centralised to better understand the implications for accountability of service delivery, to understand solutions for enhancing accountability, and how this function should operate when the Energy Directorate is established as a Business Unit. In all items, a detailed assessment will be undertaken to determine what further review of the processes are required to ensure the SPoMA, and this does not reflect that Energy is satisfied it has reached this end state yet.

Table 3: Applying the 7-box model to the City of Cape Town's core electricity utility functions

7 Box Model Category	Current State of Accountability in Cape Town
Accountability of full value chain	Separate Directorate
Asset Creation	Accountability held by Energy Directorate
Asset Management	Accountability held by Energy Directorate
Human Resources	Accountability held by Energy Directorate Oversight by Corporate
IT, Fleet, Facilities	Accountability held by Energy Directorate
Customer Services	Led by Corporate, supported by Energy Directorate
Finance	Accountability held by Energy Directorate Oversight by Corporate
Supply Chain Management	Accountability held by Energy Directorate Oversight by Corporate

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4.2. Functional Review and Restructuring

The following section outlines the business model and short- and medium-term priorities of the three business units making up the municipal electricity utility (Generation, Distribution, and Retail).

The Generation Business

- Business Model: utilising City-owned generation assets to operate within an increasingly competitive energy market.
- Short term: The City will look to optimise the existing and already planned fleet of generation and storage assets to provide cost-effective energy for municipal service delivery and ancillary services.
- Medium-to-long term:
 - Beyond this threshold, the generation business will explore opportunities to leverage city resources, such as available roof space, land, skilled staff, and the City's balance sheet to provide cost-effective energy supply to residents and businesses.
 - All decisions relating to the City's generation business must be cognisant of operating within an increasingly cost-competitive environment where there is significant private sector participation, along with the need for the generation business to operate in a financially self-sustainable manner.

The Grid Services Business

- Business Model: Regulated operation and maintenance of the City's distribution grid as a monopoly in City Supply Areas, while allowing for private mini-grids.
- Short-Term:
 - In City Supply Areas, the City will continue to be the sole provider of distribution grid services and manage and maintain the electrical grid as a platform for the safe and cost-effective transportation and storage of electricity from multiple sources to customers, alongside private mini-grid operators.
 - The distribution business will include an enhanced Distribution System Operator function to operate the grid and effectively balance energy demand and supply from increasingly diverse and variable energy sources and users.
- Medium-to-long term: The City intends to remain a grid services provider in the long term, operating largely within a monopoly in City Supply Areas. This is to ensure equitable access to a safe and well-maintained electrical distribution grid.

The Retail Business

- Business Model: Regulated monopoly bulk supplier of electricity to customers in City Supply Areas delivered via the grid services business and mandated to ensure revenue collection from customers for this service.
- Short-to-medium term:
 - The City's electricity utility will remain responsible for sourcing bulk electricity from the City generation department as well as other sources to meet demand for grid electricity from Cape Town customers.
 - The City's electricity utility facilitates the implementation of a wheeling programme in response to demand from larger customers.
- Medium-to-long term:
 - The City will continue to be the supplier to the vast majority of customers in City Supply Areas. As competitive markets develop in the generation space, this will open opportunities to source more cost-effective electricity.
 - The City recognises that customers will have greater choice to select from a range of suppliers operating within the City Supply Area, as offered by energy trading platforms and wheeling.

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With significant shifts expected in the short term with regard to how the wholesale electricity market operates in South Africa, the City of Cape Town is preparing itself as a utility to be a valuable contributing member of this market to both manage risks and take hold of opportunities in this transition. The strategy includes the establishment of a Distribution System Operator that controls and dispatches all generation embedded in the City's network. The City intends to procure both energy and capacity from a number of external and non-embedded sources via long-, medium- and short-term contracts and trade (procure and sell) via daily contracts. This will include Eskom Generation, Independent Power Producers, Wholesale day-ahead market, Energy Traders, and/or own generation plants. The objective is to ensure an adequate supply of electricity to the City Supply Area's customers at the most efficient price, taking the carbon-neutral requirements into account.

To further strengthen the understanding of required business functions in the utility, the City is developing an Enterprise Architecture Model to map functions against SANS/IEC 61968-1:2020.

4.3. Workforce Skills and Capacity

A Strategic Workforce Plan (SWP) is developed by each branch and department in the Energy Directorate in collaboration with the Energy Human Resources Business Partner (HR BP) and reviewed by the Corporate Human Resources and Organisational Development teams. This is then used to review existing and new positions and job descriptions. A SWP entails the strategic alignment of the organisation's human resources needs with its strategic direction and focuses on critical and core roles in the organisation. Strategic alignment is accomplished by determining future workforce needs, analysing the current workforce, identifying the gaps between the present workforce and future needs, and implementing solutions to close such gaps, so that the organisation can accomplish its mission, goals, and objectives.

4.4. Overview of Institutional Reform Roadmap Actions

Metro Trading Services Reform Conditions	Description of Current State	Proposed reform / enhancement
<p>Single point of management accountability for the business (incl. revenue & customer mgt), with effective professional management accountable for performance (with control over essential functions).</p> <p>Additional management capability may be needed (e.g., through management contracts).</p>	<p>City of Cape Town Energy Directorate has a dedicated Executive Director (ED). The ED reports directly to the City Manager.</p> <p>The ED: Energy has a manager for finance and electricity retail management, which includes customer management, reporting to him via Director: Electricity Generation and Distribution.</p> <p>Corporate shared services utilised by the Energy Directorate include: human resources, supply chain management, information systems and technology, treasury, budget office, communications, policy and strategy support, etc. The electricity Trading Service governs some of these services through agreements and pays a recharge rate for them, while</p>	<p>Establish the Energy Directorate as a Business Unit with the Executive Director as a single point of accountability for the full municipal energy services value chain by:</p> <ol style="list-style-type: none"> 1. Mapping and reviewing all functions (components of the value chain) currently centralised or shared with corporate services in light of the impact on accountability 2. Undertake options analysis for operating models and develop recommendations for enhancing accountability for Energy Services Value Chain 3. Review, select, and implement recommendations to establish single point of

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Metro Trading Services Reform Conditions	Description of Current State	Proposed reform / enhancement
	<p>others remain without agreements in place. Where relevant, SAP holds the agreed processes for corporate services and shared services.</p>	<p>accountability and Energy Business Unit</p>
<p>A fit-for-purpose institutional structure to promote management effectiveness and accountability, and to support sound financial performance (including ability to raise loans).</p>	<p>The City overall, inclusive of the Energy Directorate, has received a clean audit from the Auditor General for the past few years. This indicates a high degree of management effectiveness and accountability, along with sound financial performance. These clean audits are a critical enabler for raising loan finance at concessional rates.</p> <p>The electricity utility is a separate directorate in the City with its own Executive Director that reports directly to the City Manager and with its own manager for finance that oversees the financial and commercial operations of the trading service.</p> <p>The current institutional structure is supportive in raising loans as indicated by the City's loan book.</p>	
<p>Clearly defined relationship between the service and the city</p> <p>(1) full financial transparency for the energy service; and (2) a clearly defined financial relationship between city and service.</p>	<p>Revenue collected for energy trading services by the City's Revenue Department is ring-fenced for exclusive use by the utility. Revenue is allocated to an Electricity Profit Centre and coded accordingly. There are also allocation rules that govern debt collection from customers.</p> <p>A single audited financial statement is completed for the City annually, which highlights the financial position of the Energy Directorate separately.</p> <p>The City has completed a Cost of Supply Study and submitted it to NERSA for the past 3 financial years. This study demonstrates financial transparency of the utility, while also supporting the</p>	<p>Develop a separate audited financial statement for the Energy Directorate.</p> <p>Review existing financial agreements for recharge rates to confirm value for money.</p>

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Metro Trading Services Reform Conditions	Description of Current State	Proposed reform / enhancement
	<p>implementation of increasingly cost-reflective tariffs.</p> <p>The Electricity Trading Service pays a required (cost driver) recharge rate for corporate and shared services that is funded from the tariff.</p>	

5. Overview of the Business and Investment Plan

The Business and investment plan for the electricity utility in the City of Cape Town is underpinned by two focus areas:

1. Tariff and Financial Reform
2. Infrastructure and Technology Reform

The sections below unpack these two; highlighting the current state with its challenges and opportunities, the outcome desired for each, and the related activities to be implemented over time.

Metro Trading Services Reform Conditions	Summary of current state	Description of Current State	Proposed reform / enhancement
<p>Turnaround in cash revenue</p> <p>Significant improvement in revenue completeness (metering and billing) and cash collection (enforcement of credit control).</p> <p>This will not be easy in the current economic conditions but is essential.</p>	<p>Implemented and can be enhanced</p>	<p>Most customers are on prepaid meters and the meter replacement programme to increase the number of customers on prepaid meters is underway.</p> <p>Payments for prepaid electricity are made directly via the Energy Directorate's vending system. Credit meter payments and any monthly fixed charges are routed to the Energy Directorate via the City's revenue collection office using the SAP billing system.</p> <p>The revenue protection team is adequately resourced to investigate and mitigate issues on meter tampering and illegal connections in formal areas.</p> <p>The City's credit control and debt collection policy is updated annually and applies to all trading services.</p>	<p>Additional measures are required to combat illegal connections and meter tampering in informal areas. This will include increased resources for monitoring of and responding to alerts from security devices installed in infrastructure and greater partnership with communities and neighbourhood watches to instil a sense of ownership of infrastructure.</p> <p>Reduce the administrative burden associated with meter reading by promoting the replacement of credit meters with pre-paid meters and, where applicable, smart meters.</p>

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<p>A financial surplus is needed to support higher levels of investment through loan finance.</p> <p>Grants are not sufficient to meet investment needs.</p>	<p>Implemented and can be enhanced</p>	<p>The Energy Directorate currently operates with a financial surplus that is allocated towards capital replacement reserves, the repayment of loans for infrastructure, and as a dividend to the City from historic investment in infrastructure.</p> <p>Electricity infrastructure investment is financed primarily through the capital replacement reserve fund and loans, with a small contribution made by grants. Working in close collaboration with the Energy Directorate, the City takes out loans for electricity infrastructure investment based on its corporate balance sheet. This benefits the Energy Directorate as using this large balance sheet results in more concessional interest rates on loans.</p>	<p>Restructure tariffs to align revenue collection and the source of revenue with expenditure, whether fixed or variable in nature.</p> <p>Financial reforms to improve operational cost efficiency.</p> <p>Review of the current energy cross-subsidisation framework.</p>
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5.1. Tariff and Financial Reform

The financial sustainability of the utility is a prerequisite for optimal functionality. The structural and technological changes in the utility business model must adjust to a changing energy system which requires a commensurate change in financial arrangements to ensure appropriate cost recovery and management. Furthermore, it is critical that the evolution of the electricity utility in response to the transitioning energy system is managed in a way that reduces the risk exposure of the financial sustainability of the City more broadly.

The goal is to have a financially sustainable electricity utility that encourages private-sector participation in energy supply, safeguards the provision of subsidised energy access to indigent households, and ensures that the cost of providing and maintaining electricity infrastructure is fairly distributed across customers.

This plan therefore focuses on three critical areas of financial reform; namely

1. Tariff model reform;
2. Modernising billing and collections;
3. City financial model reform.

Reform across these areas is governed by the following principles:

- **Fairness and Transparency:** The cost of transitioning the energy system in Cape Town is appropriately and fairly apportioned across customers and is transparent to all stakeholders involved. Pricing is used as a tool to communicate transparently and encourage the sustainable use of energy, including energy efficiency and time of use.
- **Cost-Reflectiveness:** The level and structure of electricity tariffs will, in the long term, reflect as closely as possible, the underlying costs (variable and fixed) of supply for the majority of consumers.
- **Household Affordability:** Changes in the energy tariff structure must be cognisant of how the City leverages costs for municipal infrastructure and services; where the total costs levied on

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the household are understood. The affordability of municipal services at the household level, in terms of absolute cost and the pace of change introduced, will form a key departure point for the restructuring of energy service tariffs and their impact on property-based charges.

- Enabling cross-subsidisation of low income households: Electricity supply to substantially low-income households will need to be held below full cost-reflective levels in the medium to long term, for social-development reasons.

With a restructured tariff and through implementing financial reforms, it is anticipated that the current funding strategy that finances investment through loans as well as the capital replacement reserve will continue to remain viable.

Key City Action Areas

Tariff Model Reform

Tariffs are the mechanism through which utilities recoup revenue to cover the costs of services rendered and resources provided. These costs include fixed costs to provide network service connections and the ongoing operations and maintenance of the electricity grid; as well as variable costs of the actual electricity provided. While the City has a certain level of control over the fixed costs, the variable costs are derived directly from buying electricity, which at present is predominantly from Eskom. This means that the tariff structure implemented by Eskom, especially the cost and structure of the wholesale electricity tariff, determines how the City structures its tariffs. How Eskom changes its tariff structure, will therefore directly affect how the City undertakes tariff reform and the changes that customers see in the tariffs for electricity.

Traditionally, municipal utilities have used tariffs that have combined fixed and variable costs, with current electricity tariffs available online on the [City's Website](#). However, this is no longer viable in a context of decreasing energy demand, as the revenue recouped in this manner no longer covers the cost of critical operations, maintenance and investment needed for the distribution grid. This restructuring of the tariff is important for the long-term financial sustainability of and continued investment in the electricity distribution network, which all residents and businesses will continue to rely upon in new ways, as the sources of energy and the flow of electricity across the grid becomes more complex.

Customers in Eskom Supply Areas are subject to a different tariff structure and currently do not contribute to an investment in City services when purchasing electricity. In applying the principles of 'fairness and transparency' to tariff structure reform, greater alignment between these tariff structures should be explored.

The City will redesign electricity tariffs and assess the viability of a range of tariff restructuring scenarios, taking in to account cost reflectivity for fixed and variable costs, with the aim of:

- Accurately representing the fixed costs of providing and maintaining the distribution grid and distribute these costs appropriately, fairly and transparently across customers;
- Sending pricing signals to customers to promote peak-shifting to limit the need to commit resources for upgrading network infrastructure and generation capacity solely in response to a peak in demand at certain times of day or times of year;
- Enabling increased installed capacity in response to the current context of severe electricity supply constraints.

Modernising billing and collections

With the rise of new energy services and stakeholders, comes a more complex billing and collections environment, where retail transactions will take place more frequently and involve more parties per transaction. This requires a shift in billing and collection processes to accommodate incremental, bi-

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directional, and market-responsive and near real-time transactions that are supported by smart meters and responsive retail software. These actions are closely linked to the roll out of Programme 1.3 Infrastructure and Technology Reform. Key action areas include:

- Explore ways to use electricity metering and billing mechanisms to enhance the collection of electricity revenue.
- Address the technical constraints to applying time-of-use tariffs due to capabilities of the current metering fleet, through exploring options for smart residential metering options which allow for communication of electricity usage over time.
- Investigate technical and financial feasibility of updated billing software that can handle the increasingly complex nature of retail transitions in the energy system.

Financing the capital budget

The actions in the Energy Strategy will require a higher level of investment than previously undertaken by the City of Cape Town in order to position the City to take hold of a larger mandate in the energy sector. Financial modelling shows that this budget could be financed by the City cost effectively, based on its balance sheet and from its tariff income. Capital grants will be used to prioritise access to basic services. The City is able to achieve efficient financing of capex through a pooled City financing strategy. Grants from the National government, such as the Urban Settlement Development Grant and Equitable Share, partially cover the costs of providing services, such as distribution infrastructure, connections and Free Basic Electricity, to indigent households. Beyond these more traditional approaches to financing investments for service delivery, the liberalising energy market offers the opportunity to leverage the private sector to deliver infrastructure and services. This would then rely on payment for these services provided through operational expenditure, as is the case with Power Purchase Agreements with Independent Power Producers.

City and utility financial model reform

The sale of electricity is currently a valuable source of revenue for the City of Cape Town along with property rates and other service charges. The sale of electricity not only cross-subsidises the provision of energy services to indigent households and the provision of street and public lighting, but also provides for a contribution from electricity sales to the cost of other municipal services provided by the City, such as clinics, libraries, parks, etc. These additions to the cost of network services and the cost of energy require a review to ensure the ongoing affordability of energy costs for customers and to ensure that the City utility remains competitive as customers gain increasing choice in the energy market. Furthermore, the funding for these cross-subsidies is at risk as long as they are currently linked to a variable charge in a declining sales environment.

The City will undertake the following actions to ensure the financial sustainability of the services provided by the municipal electricity utility and the City, while maintaining cost reflective tariffs, as is appropriate:

- Identify and explore opportunities to drive cost efficiencies and cost savings in the delivery of the service
- Explore opportunities for new energy-related revenue streams
- Explore how the City's financial model may transition to reduce reliance on electricity sales revenue to fund municipal services beyond the provision of electricity services;
- Identify sustainable sources of funding for capital projects and non-network-based electricity services.
- Review of subsidies within the electricity tariff for services outside of electricity distribution and identify opportunities to find alternative sources of funding for these subsidies.
- Package a long-term electricity infrastructure investment pipeline to engage with financiers to source sustainable financing for capital projects.

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5.2. Infrastructure and Technology Reform

The distribution network is a significantly valuable asset that the City owns and operates. Electricity networks form the backbone of reliable and affordable electricity systems and also support the uptake of new renewable generation. The ongoing maintenance and refurbishment of current infrastructure is essential to protect historical investments and ensure maximum benefit to all who use the distribution grid. Decision regarding investment in this area are governed by national standards, international standards, City Standard Operating Procedures, and risk assessments.

Beyond this, there is a need to evolve the functionality of the grid to accommodate an increase in distributed and embedded energy resources across City Supply Areas. This is mainly considered feasible through investment in enhanced and new digital systems that will support real-time decision-making for operations and maintenance.

There are a number of threats to the distribution grid's optimal functionality, with critical ones that are monitored and proactively addressed on a regular basis including:

1. Theft and vandalism of infrastructure: The City must work collaboratively with a range of stakeholders across law enforcement services, communities, and others to develop innovative mechanisms to help curb the continuation of this threat.
2. Impacts of climate change on infrastructure from shocks in high risk areas, such as areas of extreme coastal flooding, or due to increasing stress on infrastructure as the climate changes, such as heat stress. To prepare for and adapt, the City takes in to account the risks that climate change poses to current and future assets in all infrastructure planning.
3. Deterioration or limitations of the national transmission grid: There is one power system operating within South Africa, of which the City's distribution system is one part. There are national recovery plans in case of transmission grid outages or collapse that the City will follow and contribute to in the case that such an event occurs.

The goal is therefore to have enhanced utility operations that support the integration of more distributed energy resource, through modernising and maintaining infrastructure and leveraging digital technologies to ensure a safe and cost-effective distribution grid service and enhanced system operator functionality.

Key City Action Areas*Modernising grid infrastructure for improved operations and maintenance*

Improving the frequency and accuracy of information about the performance and condition of electrical infrastructure enables the electricity utility to enhance network reliability by reducing the number and duration of customer interruptions, ultimately improving customer satisfaction.

Furthermore, the use of intelligent devices in electricity grids has aided utilities in more accurate tracking of reliability metrics like SAIDI and SAIFI during unplanned outages. Key actions include:

- Leverage technology for more targeted and efficient maintenance of electrical infrastructure, including self-monitoring infrastructure systems, in order to increase the cost-effectiveness of network service.
- Deliver capital investment pipeline to maintain and upgrade distribution network infrastructure to ensure the ongoing high quality of service to customers.
- Replace ageing infrastructure with modern, smart devices for faster turnaround time when responding to faults and to proactively maintain network infrastructure.
- Increase protection of critical infrastructure and prevent service disruptions due to vandalism and theft.

Enabling embedded generation and new energy services

The City is also committed to maximising the value of the distributed energy resources to customers, while meeting its mandate to provide a stable electricity network. The electricity distribution grid has

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primarily been designed for the flow of electricity from a generator located outside of the network to a customer within the network. However, with the increase in embedded generators and the increase in bi-directional flows of electricity, the distribution grid needs to be appropriately upgraded and maintained to ensure system stability and functionality. This will allow the distribution grid to accommodate distributed energy resources more effectively, as well as enable new energy service offerings and an enhanced customer interface.

- Enhance the electrical grid operating platform to provide the technology, protocols and structure to allow users to interact within a competitive energy market – including providing Distributed Energy Resource providers with the access and information they require to operate effectively and identify investment opportunities.
- Partner with National government to co-develop the necessary standards, specifications and practices for grid readiness to operate a grid with a highly variable renewable electricity share of supply (including high penetration of SSEG) and more decentralisation.
- Invest in more accurate measurement and metering of energy flows in order to support the more sophisticated pricing and load management necessary.

Using digital technologies for improved network control

Globally, electricity utilities can make use of digital technologies to optimise operations, network control, and the customer interface, while providing the opportunity for a step-change in transforming utility operations and management. To effectively support a more decentralised energy market, there will be a need for increasingly real-time and highly granular data, alongside an increase in the skills and capabilities to process and use this data to the benefit of the energy system overall.

The City of Cape Town's Network Control Centre currently implements real-time control and monitoring of the network infrastructure to maintain network stability, matching of electricity supply and demand and preventing service disruptions. In particular, self-monitoring and self-correcting systems will be a priority. With increasing distributed generation, particularly renewable energy sources, network stability issues at local level will become more prominent and will require more frequent and responsive network adjustments that could be automated.

Going forward, investments in network control will result in the increased automation of these systems and processes, with digital technologies and artificial intelligence integrated into control systems to a greater degree. The need to forecast demand and supply will increase significantly as the City takes on greater functionality as a system operator. Critical to this is ensuring that the investments and improvements made are fit-for-purpose and provide an appropriate and necessary level of digital maturity, while better securing these systems against the cyber threats to which they may be increasingly vulnerable.

Key actions include:

- Invest in the software and systems for enhanced network control and operations in order to effect better load management and maintain network stability in response to more variable electricity supply from renewable generation and mitigate against higher stages of load shedding.
- Enhance retail functions by optimising the current communication systems for real-time management and metering of the flow of electricity control and allow for increased bi-directional communication with customers over time.

6. Conclusion

In conclusion, the Electricity Trading Services Reform Strategy aims to transform the electricity trading services in metropolitan municipalities by introducing institutional, financial, and organisational reforms. The strategy seeks to establish a single point of accountability in an Energy Business Unit thereby improving operational efficiency, enhance service quality and reliability, and increase cash revenues and financial sustainability.

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The City of Cape Town Municipality has made some movement towards establishing a Business Unit and a Single Point of Management Accountability (SPoMA) for the Energy Trading Service. However, this is not yet achieved in full, but is aimed for. To implement this greater level of accountability, the City commits to review the current people, processes, and systems in place that govern the relationship with the City to evaluate how they either enforce or detract from the establishment of SPoMA. With this review and analysis, the City is then able to determine the most appropriate pathway to establish a business unit and SPoMA with the potential reform of key aspects of the municipal energy value chain.

Importantly, while it is acknowledged that the City of Cape Town electricity utility meets many of the conditions for trading services reform at present, there are still opportunities for improvements and enhancements. These enhancements incorporate the critical reforms required to ensure clear accountability for the delivery of the service and to adapt to a changing energy sector related to the disruptive energy technologies, the Just Energy Transition, and the establishment of the South African Wholesale Electricity Market, to name a few.

The implementation of this reform strategy requires a collaborative effort from all stakeholders, including municipal leadership, technical teams, and external partners. It is essential that we work together to enhance a single point of management accountability for electricity trading services, introduce performance-based financial incentives, and establish a dedicated business unit with clear reporting lines.

Through the successful implementation of this strategy, we can achieve a more efficient, effective, and sustainable electricity trading service that benefits both the municipality and its citizens. We believe that this reform strategy will be a critical step towards improving the overall performance of electricity trading services in metropolitan municipalities and contributing to the long-term economic growth and development of our cities.

By working together, we can make a positive impact on the lives of millions of people who rely on energy trading services every day in Cape Town.



CITY OF CAPE TOWN
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STAD KAAPSTAD

Annexure A1

Electricity and Energy

Trading Service Reform Strategy:

Institutional Reform Roadmap

Energy Directorate

January 2025

Updated as required by National Treasury.

*Please note some confidential content has been
redacted to make this document suitable for public
publication.*

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Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

1. Introduction

This Institutional Roadmap must be read in conjunction with Annexure A: Electricity and Electricity Trading Service Reform Strategy approved by Council in January 2025. Further to the Reform Strategy, this document confirms that the Electricity Utility's¹ governance framework currently represents Model 2 as per the guidance note on Single Point of Management Accountability and highlights the City of Cape Town's ("the City's") commitment to continuous improvement in service delivery through a business-oriented approach. The table below outlines where the criteria for this Institutional Roadmap are addressed.

Table 1: Table showing alignment between Trading Services Reform Programme criteria and the document contents

	Criterion	Comment/Question	Section of Document
1	Does the Electricity Institutional Roadmap (IRM) show clear steps and timelines to establish a single point of management accountability?	<ul style="list-style-type: none"> • Are there clear indications of the steps to be taken, and the expected timelines (short, medium and long-term) • Are there indications of effective and functional Head of Utility's (HoD's) control of all trading services operations and support • Are there indications of when HoD's responsibility for performance and compliance will be established. 	Section 5: Institutional Roadmap Action Plan
2	Does Electricity IRM indicate a path towards obtaining sufficient Electricity management, and change management, capacity, as required?	<ul style="list-style-type: none"> • Are there indications of technical capacity and capability, systems, change leadership, additional to current, as required? • Are there indications of the change management and leadership to support the establishment of single point of management accountability? • Are there indications of capability to support to execution of the changes required? 	Section 2: Management Capacity Section 3: Institutional Review and Optimisation Section 4: Functional Review and Restructuring
3	Does the Electricity IRM show a path to governance arrangements which will protect and re-enforce Electricity Trading Services Reform Strategy (TSRS)?	<ul style="list-style-type: none"> • Is there a demonstration of a clear path and timelines to achieve new governance arrangements? • Is there a demonstration of focus on and accountability for long-term performance? 	Section 3.1. Single Point of Management Accountability
4	Does the Electricity IRM show a path rapidly achieve financial transparency standards required to support the Electricity TSRS?	<ul style="list-style-type: none"> • Are there plans and dates to publish separate Electricity financial statements within overall metro Audited Financial Statement (AFS) (per National Treasury specimen and instructions issued separately) • Is there a plan to publish with the AFS a full statement of transactions between the metro and trading service (share of equitable share, conditional grants, other revenues, trading services contribution to/from metro rates account, cash, loans, etc.). 	Section 3.2 Financial Transparency Section 5: Institutional Roadmap Action Plan

¹ In this document, the City of Cape Town's Electricity Utility is also referred to as the Energy Directorate.

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

The City of Cape Town Municipality has made some movement towards establishing a Business Unit and a Single Point of Management Accountability (SPoMA) for the Energy Trading Service. However, this is not yet achieved in full, but is aimed for. To implement this greater level of accountability, the City commits to review the current people, processes, and systems in place that govern the relationship with the City to evaluate how they either enforce or detract from the establishment of SPoMA. With this review and analysis, the City is then able to determine the most appropriate pathway to establish a business unit and SPoMA with the potential reform of key aspects of the municipal energy value chain.

The Electricity Utility recognises that improvements in electricity service delivery are necessary, particularly in relation to enhancing accountability for the full municipal energy value chain, a more optimal institutional structure to support operational efficiency and financial transparency in the changing energy landscape. Even in areas where the Utility is doing well, it acknowledges challenges and is committed to addressing them as part of its goal to continuously improve service delivery.

Three action areas are therefore planned for this programme of institutional and workforce reform:

- **Institutional Review and Optimisation:** Establish the Energy Directorate as a Business Unit with the Executive Director as a Single Point of Accountability for the full municipal energy services value chain. This will require a review of the existing relationship with the Corporate and shared functions held within the City of Cape Town and, where necessary, amendments will be recommended and reviewed to align with this strategic objective. This focus area includes enhancing financial transparency through this process too.
- **Functional Review and Restructuring:** to ensure the internal organisation of the functional areas of the energy business are aligned with the services required in a more competitive energy market and changing customer needs.
- **Workforce Skills and Capacity:** Review and analysis of current and future skills and capacity requirements to deliver on functional requirements of a future-fit utility business.

This Institutional Reform Roadmap provides an overview of the current management capacity and capabilities within the City of Cape Town's Energy Directorate, followed by deep dives in to the future states for each of the three

2. Current Management Capacity

The City's Electricity Utility has gone some way to establishing a single point of management accountability in the Executive Director (ED) for Energy. The ED reports directly to the City Manager and oversees the operations and management of the trading service.

There are still corporate shared services used by the Electricity Utility including oversight of human resources, supply chain management, information systems and technology, treasury, budget office, communications, policy and strategy support, etc. At present, there are different approaches for how accountability of support services is managed by the Energy Directorate at present and the Energy Directorate pays an explicit recharge rate for them:

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

1. Internal agreements (either service level agreements, policies, standard operating procedures, or agreed processes in SAP).
2. The Energy Directorate has an in-house staff member who reports to the Executive Director of Energy, named a business partner, responsible for the delivery of services in line with of City-wide policy and responsible for coordinating with the oversight function performed by corporate services in the City.

The first option is the most common, with the second option being implemented only in the Human Resources function at present, as detailed in the box below.

The functions of an Human Resources (HR) Business Partner

Within the City of Cape Town, the function for Human Resources has adopted a decentralised approach in support of the establishment of a business unit and a single point of management accountability. This approach offers an example of a pathway to enhance accountability in trading services while still maintaining appropriate oversight by the wider City. HR policies and systems for oversight and compliance are developed by the Corporate HR department, but each trading service has an in-house business partner who implements all HR activities and reports to the Executive Director of that trading service. The HR functions undertaken by the HR Business Partner include workforce planning, creation and approval of new posts, post abolishment, labour engagements, recruiting, employment contracts, staff training, disciplinary action, and employment termination processes. The Business Partner is then also responsible for coordinating with the corporate HR function, as required by policy, on behalf on the trading service.

2.1. Organisational Structure and Capacity

Further to the City-wide positioning of the Electricity Utility provided in Annexure A: Electricity Trading Services Reform Strategy, the organisational structure is provided below in two formats. Figure 1 illustrates the reporting structure showing lines of reporting from the unit heads through branch managers and department directors, up to the Executive Director (ED) of the directorate (referred to as the Electricity Utility in this document). Figure 2 complements this by displaying the cost and profit centre structure, which is assigned at each level of the organogram. This structure enhances financial accountability and transparency, enabling detailed budget allocation and spending oversight, to a high degree of granularity. The similarity between these two diagrams indicates an aligned organisational structure that promotes financial accountability. These diagrams also indicate the management of different facets within the Utility. A short description of the mandate of each department and branch is provided thereafter.

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Figure 1: A diagram representing reporting line and managerial accountability (larger version attached as Appendix A)

Figure 2: A diagram representing the cost and profit centre structure of the Utility

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

2.1.1.Support Services

This branch coordinates Human Resources support to the Utility and is responsible for training and skills development, at the EGD Brackenfell Training Centre, Recruitment & Selection, Employee Relations (through a Service Level Agreement with the Corporate Centre) and general administration.

2.1.2.Electricity Generation and Distribution (EGD) Department

The generation and distribution of electricity in Cape Town started in 1895 with the inauguration of the Graaff Electric Lighting Works at Molteno Reservoir. In 1932, a generation pooling agreement was reached between the City and Eskom (established in 1923). The first temporary bulk supply from Eskom was only taken in 1965, and converted to a 20-year supply in 1971 marking the City's increasing reliance on Eskom for bulk supply of electricity.

The year 2000 saw the creation of the Unicity after almost a decade of local government restructuring. The consolidation of EGD in its current form from five electricity distribution departments occurred in 2005, after a period of interim arrangements. The following branches make up the EGD Department in the City.

HR Business Partner

The functions undertaken by the HR Business Partner include workforce planning, creation and approval of new posts, post abolishment, labour engagements, recruiting, employment contracts, disciplinary action, staff training, and employment termination processes. The Business Partner is then also responsible for coordinating with the corporate HR function, as required by policy, on behalf on the trading service.

Finance & Commercial Branch

This branch provides financial services to the Utility and is responsible for budgets, accounting, tariffs, regulatory reporting, business innovation (SAP invoicing and billing reconciliation), and insurance and assets.

Electricity Retail Management (ERM)

This branch is structured based on the electricity retail ISU (Integrated solutions for utilities) module in SAP and is responsible for customer services including Customer support services, Revenue Protection, Revenue Management, Vending Services, Operational Technology, Electricity Trading, and Measurement.

Distribution System Operator (DSO)

This branch is responsible for managing the importation, distribution, and control of the electricity distribution networks. They are also responsible for the administration and development of the Supervisory Control and Data Acquisition (SCADA) system.

Generation

This unit is responsible for operating and maintaining the Steenbras Hydro Pump Station (SHPS) Scheme and the Roggebaai and Athlone jet turbine generators.

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Engineering

This branch is the primary network asset creator and is responsible for planning, designing, developing, and maintaining records of the High Voltage (HV), Medium Voltage (MV), and Low Voltage (LV) networks. They are also responsible for all quotable connections and for coordinating public lighting development and electrification projects.

Infrastructure Operations (IO)

This branch is responsible for the daily maintenance, operations, and restoration of the HV networks. It consists of a centralised HV component. They are also responsible for network electrical protection and SCADA communications systems.

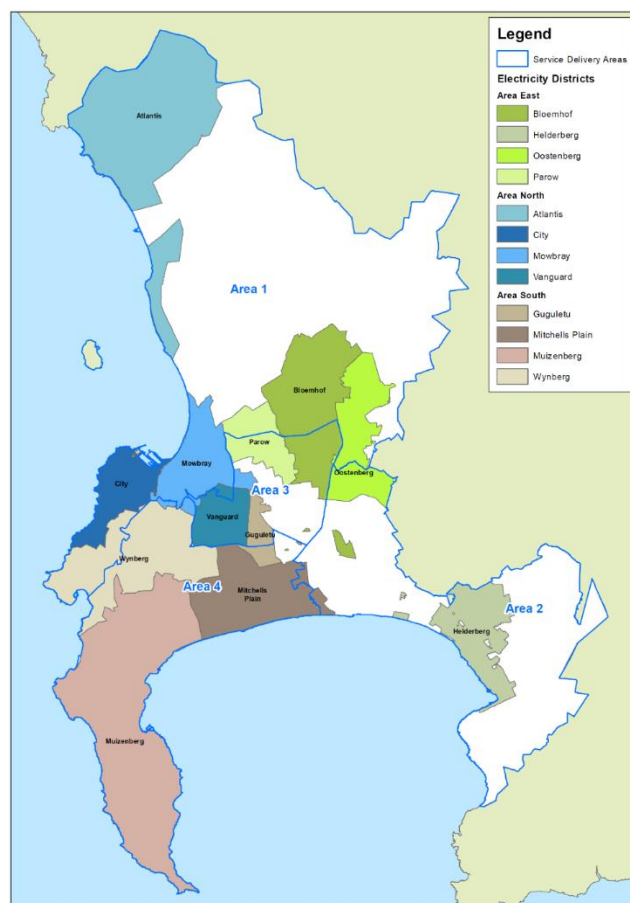
Enterprise Asset Management (EAM)

This is the largest branch and is responsible for the daily maintenance, operations, and restoration of the MV and LV networks. It consists of a decentralised district (MV and LV) component with 12 depots clustered into three Distribution Areas. They are also responsible for network electrical protection and SCADA communications systems.

This branch manages network assets according to the ERP PM – Plant Maintenance module and is responsible for the development of maintenance plans for execution by the Infrastructure Operations branch and the depots. They are also responsible for service and equipment standards and related tenders, and the development of mobile solutions for the operations.

This branch also provides support services to other branches within EGD and is responsible for fleet, plant and equipment, electrical support services, electronic security of network assets, and the festive lighting programme.

Electricity Distribution is provided via twelve Districts clustered in three Areas (North, South, and East). Each District is responsible for maintenance, non-remote operations, and minor construction and operates from a District office located within the District. Distribution Systems Development projects, Service Connections, Engineering Support, and First Line Response are operated at the Area level rather than the District level. Integration with the four Service Delivery Areas of the City is coordinated by the Area Heads for purposes of project and service delivery integration. The various jurisdictions are shown below.



Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Figure 3: City service delivery area vs. Electricity distribution supply areas

2.1.3. Sustainable Energy Markets (SEM) Department

The Sustainable Energy Markets (SEM) Department was created in 2017 within the Electricity Utility as part of the Organisational Development and Transformation Plan (ODTP) process. SEM's mission is to be a pioneer in Cape Town's energy landscape who, through partnerships, drives innovative projects, policies, and processes to progressively achieve energy security and navigate the Electricity transition to the benefit of all. SEM plays a key change management role in the Utility by providing the capacity needed to navigate and implement the introduction of new Electricity technologies and new business models to the municipal environment.

Generation Development and Municipal Energy Efficiency

This branch is responsible for designing and delivering high-quality power generation, procurement, and Electricity efficiency projects. It drives the adoption of innovative technologies in Electricity utilisation within the City.

Data Management and Integration Platforms

This branch is responsible for leveraging data management and analysis to support evidence-based decision-making. It achieves this through data-driven and system-wide planning and modelling for optimal local Electricity supply and demand, while maintaining up-to-date, comprehensive Electricity and carbon datasets and related analysis. These resources are made available to various applications and are accessible to all stakeholders to enable evidence-based decision-making.

Sustainable Energy Facilitation

This branch is responsible for supporting households and businesses in the changing energy landscape by communicating how to make informed energy decisions and collaborating with stakeholders to address barriers to change. The branch also promotes efficient energy use and facilitates the transition to e-mobility. It also explores various interventions and research to support economically vulnerable households and communities in accessing a range of safe energy services to meet their daily energy needs.

Strategic Processes and Partnerships

This branch identifies and addresses systemic barriers to support the City's energy transition. It develops and facilitates strategies, policies, procedures and action plans to address priority focus areas and also leads on the development of research initiatives to support evidence-based strategy implementation as well as monitoring and evaluation processes to ensure effective implementation in priority areas.

2.2. Management Capability

This section outlines how the capabilities for management of the trading service is developed within the Electricity Utility and describes the relationship between the City and the Trading Service with regard to these capabilities.

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2.2.1.Strategic Management

After every local government election, the council must approve a new Integrated Development Plan (IDP). The City is currently operating under the IDP for the period from July 2022 to June 2027. Sectoral business plans are developed to align with the five-year IDP and are reviewed annually as part of the City's annual budget process. The business plan is accompanied by the Strategic Management Plan (SMP), which is developed to ensure the effective implementation of the business plan.

The sector plan gives effect to the implementation of the City's objectives and strategy, ensuring that business activities align with this strategy. In addition, the mission, vision, and strategy are communicated to supervisors, team leaders, and managers (L5 leadership) during regular Utility-level sessions, held monthly. Facilitated by the ED, these sessions present strategic direction as well as new innovative initiatives to keep team leaders and managers informed of new developments and to embed the strategy within the Utility.

Monthly Utility Management meetings, chaired by the E D, are also held to discuss and formulate not only operational matters but also strategy, risks and direction setting.

Regular management meetings are also held at the branch level to address operational issues but as well as progress of strategic items. Annual strategy sessions at branch level are conducted to develop strategic plans for the departments and ensure their optimal implementation and compliance with requirements.

Utility visioning sessions are held on an ad hoc basis to assess the changing Electricity sector, understand challenges, and determine necessary responses to optimise business and service delivery. Strategic objectives and focus areas are reported on at management meetings as well as the Energy Portfolio committee. Standing agenda items are used to provide updates on the progress of strategic focus areas.

2.2.2.Staff Management

The Utility's staffing strategy focuses on ongoing employee development to meet the needs of the business and includes maintaining apprentice training, learner technician, and graduate internship programmes. The electricity utility relies on the Skills pipeline – consisting of graduates, learner technicians, and apprentices – to fill vacancies. This approach has significantly alleviated the pressure on the recruitment process and ensured that skills are available within the business at the right time.

Recruitment within the Utility is aligned with business goals, with job descriptions continuously updated to reflect changes in operations and attract the right skills. To further enhance recruitment efforts, the Utility advertises on various online platforms to attract candidates from previously disadvantaged groups.

The Utility has also developed, and continues to develop, databases for bulk and entry-level positions. These positions are advertised at specified intervals and becomes a talent pool of pre-qualified candidates that have been interviewed and assessed, and are ready to be placed into roles as soon

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

as vacancies arise. This strategy helps with filling vacancies and reduces turnaround time in the hiring process.

Over time, as legacy positions are vacated through retirements, the department's current structure will evolve to be more responsive to the needs of the community and to the changing Electricity landscape.

Training and Skills development

Skills development training is primarily linked to the Workplace Skills Plans (WSP) and the Skills Alignment to Job Description (SAJD) programme, with the throughput of employees on these various programmes averaging 4 000 training interventions conducted per year. A SAJD model has been developed for all the job designations within the Electricity Utility with the core elements of the model being that employees can perform their job functions competently and safely.

The City of Cape Town also has a bursary programme to support recent high school graduates and current staff to pursue further studies.

The Electricity Utility has and will continue to run various skills programmes (both for purposes of skills development and as a stratagem to ensure that there are sufficient skills in the market). These comprise an Graduate internship program (learner/Pupil Engineers) registered with the Engineering Council of South Africa (ECSA), a Learner-Technician program, an Apprentice program, and a Urban Sustainability Internship Programme (UISP) program. These programs are used to upskill internal staff, deal with succession planning and right-size the race and gender balance.

The artisan training programme has two components comprising external (apprentices) and internal (depot staff) learners with the view of developing these learners for employability and the future demands of the business. The training is conducted in-house to ensure that the skills are transferable and according to the South African Qualification Authority (SAQA) requirements for electricians.

The Graduate Internship Programme seeks to help build sufficient strategic management and engineering skills capacity within the department and the programmes are specifically designed to provide interns with a logical training sequence founded on the theoretical knowledge competencies that they have learnt at Universities and within the candidate engineers programme of the Engineering Council of South Africa (ECSA). The programme pursues learning and functional exposure with a deliberate view of creating employability and employment for the graduate. The Employer expands its talent and recruitment pool from which it can select at its own discretion to satisfy immediate and future staffing needs.

The Sustainable Electricity Markets Department is passionate about the development of young professionals, and provides support to students, graduates, and volunteers in several internal and external programmes. Throughout the year, requests for volunteering and internships are sent to the Department. The management of the HR processes for this is done under the Departmental Internship Programme. The USIP Programme has been running in the City for 12 years, and annually, the Department hosts interns for 12 months. The requirement for managing the processes from the

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development of Key Learning Areas, to providing the interns with administrative support once the interns have commenced with the programme. The focus of this Urban Sustainability Internship Programme (USIP) is on the adaptation from academic environment to a working environment in the City of Cape Town, as well as broader disciplines the City offers in various Departments.

As renewable energy starts to make more of an impact within the industry, the skills programmes will be adapted to ensure that the City can respond and exercise the responsibility to make sure that renewable energy installations are done in terms of any applicable regulations and City by-laws.

Renewable energy programmes that focus on safety, regulations, and installation requirements will and are been developed to ensure that staff skills remain current for the changing electrical environment.

Retirement Change-over Management

Figure 4 indicates the age distribution of the Electricity Utility personnel as of the end of November 2022. The Utility employed 2605 employees at this stage. 35% of existing staff will retire in the next 20 years.

A smooth change-over when an employee retires is usually a challenge. Many of those who retire leave with a wealth of experience and institutional knowledge. If not properly managed, those skills are lost to the organisation. There is also a risk that their enthusiasm for the task at hand may wane as new plans for the future start to take shape.

Consideration has been given to implementing succession planning where retiring staff transfer skills to address the situation where there is a band of new, qualified, professional staff and a band of aging, experienced staff, with a gap in the middle. The result is that new appointees in senior positions are left with a very steep learning curve. Numerous mechanisms are being explored to mitigate this risk to the City.

Strategic Workforce Plan

A Strategic Workforce Plan (SWP) is developed by each branch and department in the Electricity Utility in collaboration with the Electricity Human Resources Business Partner (HR BP) and reviewed by the Corporate Human Resources and Organisational Development teams. This is then used to review existing and new positions and job descriptions. A SWP entails the strategic alignment of the organisation's human resources needs with its strategic direction and focuses on critical and core roles in the organisation. Strategic alignment is accomplished by determining future workforce needs, analysing the current workforce, identifying the gaps between the present workforce and future needs, and implementing solutions to close such gaps, so that the organisation can accomplish its mission, goals, and objectives.

Figure 4: Age distribution of Electricity Utility's personnel

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Key organisational and individual competencies have then been identified to address short- to medium-term (1–5 years) business priorities, as well as medium- to long-term (5-10 years and beyond) scenarios impacting the business. These link with the key talent segments identified as Mission Critical Roles (MCR), high professional talent, future leadership, leadership and enabling talent in order to ensure investment in the correct competencies to meet the Utility objectives and Service Delivery Budget and Implementation Plan (SDBIP) targets. The SWP is therefore a tool that enables success of the Utility-level SDBIP that is dependent on aligning key programmes and priorities with the correct position and relevant skills.

Staff Performance Management

Each staff member in the City of Cape Town has an Individual Performance Management (IPM) form linked with the Key Performance Areas from their job description. This also includes a personal development plan and the identification of key competencies required to undertake the work successfully. The IPM is set annually and reviewed twice a year by managers with staff. This allows for an individualised application of performance management, while also ensuring a standardised and fair approach across the Utility and the City more broadly. The Directors and ED review and moderate these IPM reviews before they are moderated by Corporate HR. This means that the ED, as the single point of accountability for the trading service, has oversight of staff performance management.

2.2.3. Risk Management

The City is obliged to implement risk management in terms of the MFMA and has adopted the King IV Report on Corporate Governance for South Africa, 2016. In terms of the MFMA, section 62 (1)(c)(i) the accounting officer is responsible to maintain effective, efficient, and transparent systems of financial and risk management and internal control. To achieve successful risk management, the Electricity Utility participates in the City's Integrated Risk Management (IRM) processes.

As per the assurance governance framework, circulated as part of directive 8 of 2019, "Every employee is responsible for the management of risks in the execution of their day-to-day responsibilities". The City's Consequence Management Policy further states that "*Line managers, per their accountability and responsibility duties, must: Identify and immediately report any issues (various incidents and red flags), risks and opportunities that can have a potential negative impact on the City to the appropriate level of authority, including the City Manager.*"

In line with this, the Electricity Utility Risk register was created on a web-based collaborative platform. This tool ensures accurate and sufficient risk reporting, protects the Utility's plans and goals, safeguards the staff, facilitates risk-sharing, and enables effective risk treatment. Action items resulting from control measures for each risk are assigned to the relevant individuals, and risks are monitored to determine the effectiveness of each control. Risks with a high-risk rating score (more than 80) are then escalated to the appropriate levels of management to ensure they receive the needed attention.

2.2.4. Organisational Performance Management

The Electricity Utility has multiple Performance Management platforms that they are required to report on; including:

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- Service Delivery and Budget Implementation Plan (as per the Municipal Finance Management Act),
- regulated reporting to the National Energy Regulator of South Africa,
- National Government reporting requirements (e.g. Back to Basics and Circular 88), international reports (World Bank Ease of Doing Business reporting),
- internal reporting platforms; such as the Project Portfolio Management (PPM) Platform with an associated Benefits Tracking system, which is utilised by City management to track the performance and progress of capital projects.

Monthly reports on capital expenditure, operating financial performance, revenue and expenditure are presented to the ED, Portfolio Committee for Energy, and Executive Mayor. The ED is ultimately accountable for these metrics, as is represented by the ED's Scorecard.

Performance management can be further enhanced by using these indicators to derive insight in to the trends and drivers of risk and opportunity within the business.

2.2.5.Records Management

Records Management is carried out by maintaining, managing, and storing both paper-based and electronic records, classified according to the File Plan and Schedule of records other than correspondence. This is compliant with the Western Cape Archives and Records Service Act and City's Records Management Policy. General administration includes providing ongoing Records Management training to staff within the Electricity Utility.

2.2.6.Contract Management

The City of Cape Town's first Contract Management Framework (CMF) was adopted in 2018 in response to ongoing challenges relating to contract management, most notably the high levels of Unauthorised, Irregular and Fruitless & Wasteful expenditure arising from contracts procured via the Supply Chain Management (SCM) system. A comprehensive Guide (CMG) was issued to support implementation of the citywide approach to contract management as contained in the CMF.

The City's CMF and CMG is outdated and misaligned as a result of major developments in contract management since 2019. This is currently being reviewed by the Corporate Contract Management Unit. The revision aims to:

- Address identified gaps between the City and NT Contract Management Framework.
- Align with the more modern, digitised business processes in place since 2021 due to the introduction of system based contract management activities.
- Reference key requirements of maturity and individual competency improvement in contract management.
- Assignment of new and updating existing roles and responsibilities as a result of the above developments.
- Amending the requirement for the appointment of Contract Administrators, which is only required as and when required/discretionary relaxing the current mandatory requirement

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(correction of an error in CM Framework 2019) for every contract as a result of findings issued by Internal Audit.

Monitoring and evaluation of the CMF requirements and in particular Section 116 of the MFMA is the responsibility of the Contract Management Unit - Centre of Excellence (CMU – CoE&S) and an internal contract management unit within the Electricity Utility supports this. The responsibilities for contract management in the City are as follows:

- **City Manager:** the CMU-CoE&S is responsible for ensuring compliance with section 116 of the MFMA.
- **Executive Director** responsible for adequately resourcing contract management functions.
- **Contract Owners** (typically Director) who are ultimately accountable for ensuring contracts are managed in accordance with the CMF.
- Utility's **Contract Management Offices** that provide monitoring and evaluation, but also support services within the utility.
- **Contract Managers/Administrators** responsible for "day to day" management of contracts/all activities in each phase of the Contract Life Cycle.

CRMS data is used to monitor and evaluate Citywide and Utility performance against contract management regulatory/compliance requirements, requirements of the CMF and associated indicators. This includes:

- Monthly monitoring and reporting.
- Quarterly reporting to oversight bodies such as the Audit and Performance Audit Committee as well as MayCo and Council.

2.2.7.Audit and Compliance Management

Compliance management for procurement is embedded within the Supply Chain Management policy, with processes established based on that policy. Compliance management of the MFMA Section 116 and Section 33 is dealt with by the directives issued by the City Manager. Monitoring and controls established include:

- Monthly monitoring of project-related progress comments, and contract comments on the SAP Enterprise Portfolio and Project Management (SAP PPM) platform and the Contract and Record Management System (CRMS) to assure compliance and early detection controls. CRMS also provides an Executive Management report every month tracking the contracts and amendments to them. It also provides tracking of poor-performing contractors and the interventions that the business implements.
- Contingency Management Standard Operating Procedure provides a management tool to assess whether a variation proposed will require expansion or an amendment for Time, Value, or Scope.
- Guidelines have been published to provide compliant processes for managing expansions and amendments (S116(3)), deviations in accordance with the SCM policy, and requirements for Section 33 compliance.

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- At the project level, a contract document management tool is available to provide preventative controls to ensure compliance with contractual obligations of contractual documents e.g. insurances, guarantees, taking-over certificates, etc. This is utilised on major projects and it is planned to roll out to smaller projects as well.
- For events that have already occurred, the process for self-reporting in terms of S117 has been issued from the City Manager and is being implemented.

Environmental and Occupational Health and Safety Act compliances are dealt with through existing standard operational processes established within the business processes. In addition, the Utility has aligned with the Occupational Health and Safety (OHAS) 18001 system for environmental and occupational health..

Currently, Legal Notices are tracked individually, but a new platform needs to be developed and incorporated into business processes for monitoring the progress of these from inception to completion.

NERSA license compliance reporting is a standard agenda item at management meetings, as well as at the Energy Portfolio Committee.

2.2.8. Procurement Management

The Supply Chain Management (SCM) department provides oversight for the supply and acquisition of goods and services to or on behalf of the City. These include tenders for construction works, consultant services, the disposal of goods no longer needed and the selection of contractors to assist in the provision of municipal services. Each procurement process is led by a suitably qualified staff member within the Electricity Utility and supported by Corporate SCM.

The Energy Directorate's procurement process is undertaken by implementing the following steps in line with applicable national legislation and the City's SCM Policy:

1. Demand Management
2. Specification Development and the Bid Specification Committee
3. Advertising of the tender
4. Bid Evaluation and the Bid Evaluation Committee
5. Contract Award and the Bid Adjudication Committee (Done by Corporate SCM)

2.2.9. Asset Management

International Organisation of Standardisation (ISO) / South African National Standards (SANS) 55000 defines asset management as the coordinated activity of an organisation to realise value from its assets. Realisation of value involves a balancing act of costs, risks, opportunities, and performance benefits.

The ERP Plant maintenance platform is the transactional data environment where maintenance planning, scheduling, and execution are recorded against the maintenance of significant

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infrastructure assets. The entire electricity distribution network including HV, MV & LV is represented in a multifunctional data-rich spatial geometric network model in the GIS.

The collection, population, and rebuilding of the ERP EAM system is a work in progress. A new master data design and data collection have been completed for distribution MV and LV so far, but will take some time before it is completed for all EGD physical assets, including Facilities, Generation and secondary functions. The current focus is on the HV master data design, with the HV substation master data design completed so far. Full operationalisation will take place in the medium term.

The Asset management process for the Electricity Utility is based on the Global Forum on Maintenance and Asset Management (GFMAM). This governance framework defines six management disciplines required for effective asset management, namely, Lifecycle delivery, asset management decision-making, organisation and people, risk and review, asset management strategy and planning, and asset knowledge. The management disciplines are further split into 39 knowledge areas that define the detailed asset management requirements for the management disciplines. The lifecycle delivery management discipline comprises planning, acquiring / creating, operating, maintaining, and end-of-life projects for an asset. Refer to Figure 5 for a graphical depiction of the management disciplines and knowledge areas for Asset Management based on the GFMAM framework.

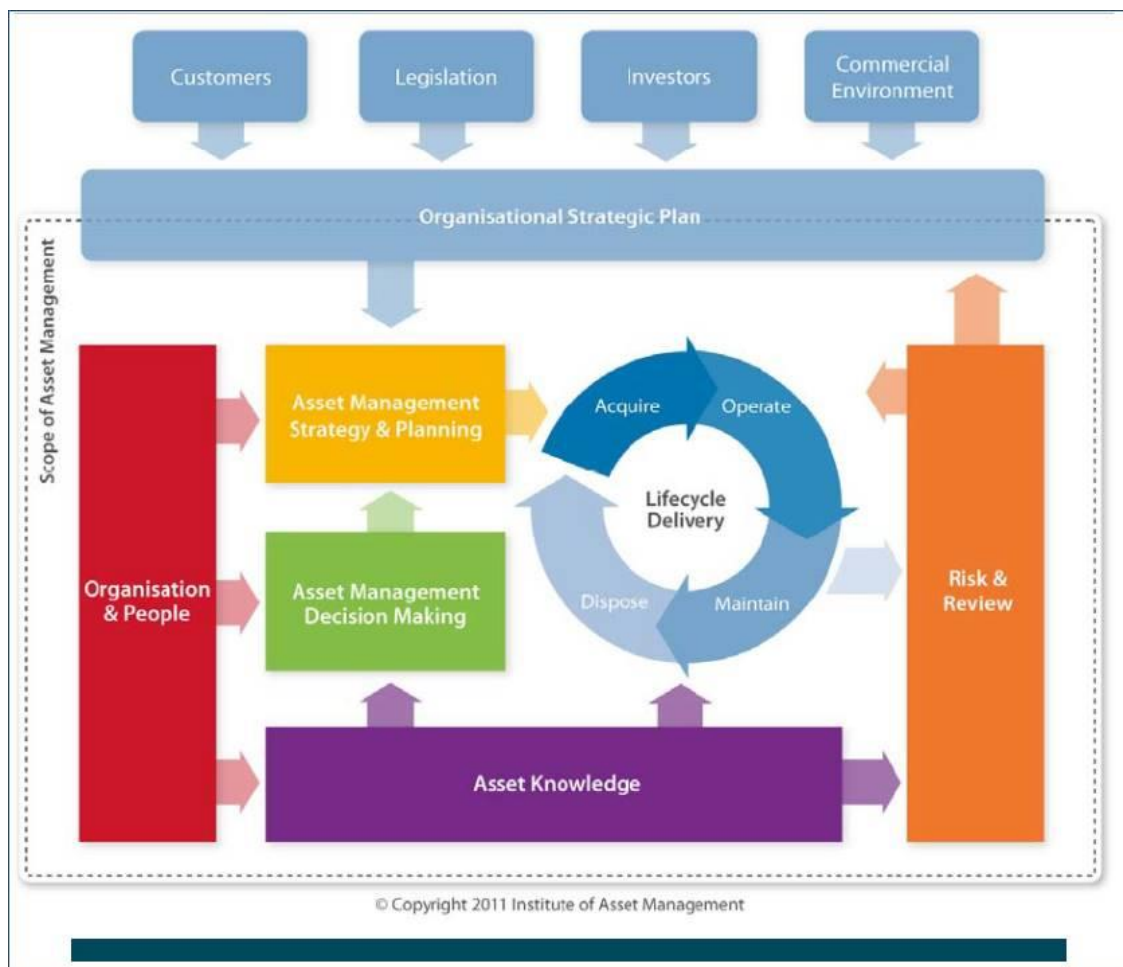


Figure 5: Overview of GFMAM

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

For each of the network components (HV, MV, and LV) there is a section managing the asset during the different phases in its life cycle. Asset management of generation assets, protection, telecom, and metering infrastructure is performed by the respective branches. All phases in the lifecycle, except for Operations and Maintenance are funded by capital expenditure.

The preventive maintenance process forms part of the greater asset management process for the Utility, which is based on the GFMAM framework for asset management. The maintenance of assets forms part of the "Lifecycle Delivery" asset management principle and is defined in a process called "Maintain Asset" (refer to Figure 5). The "Maintain Asset" process is split into corrective and preventive maintenance sub-processes. Preventive maintenance is required to minimise the risk of asset failure and corrective maintenance applies to assets that malfunction or have defects that must be corrected to avoid imminent malfunction.

Preventive maintenance maximises the value derived from assets by routinely inspecting and maintaining them to achieve the expected useful operational life of assets and minimise the risk of catastrophic failure. Preventive maintenance can be based on the condition of assets, operations performed, or specific time intervals.

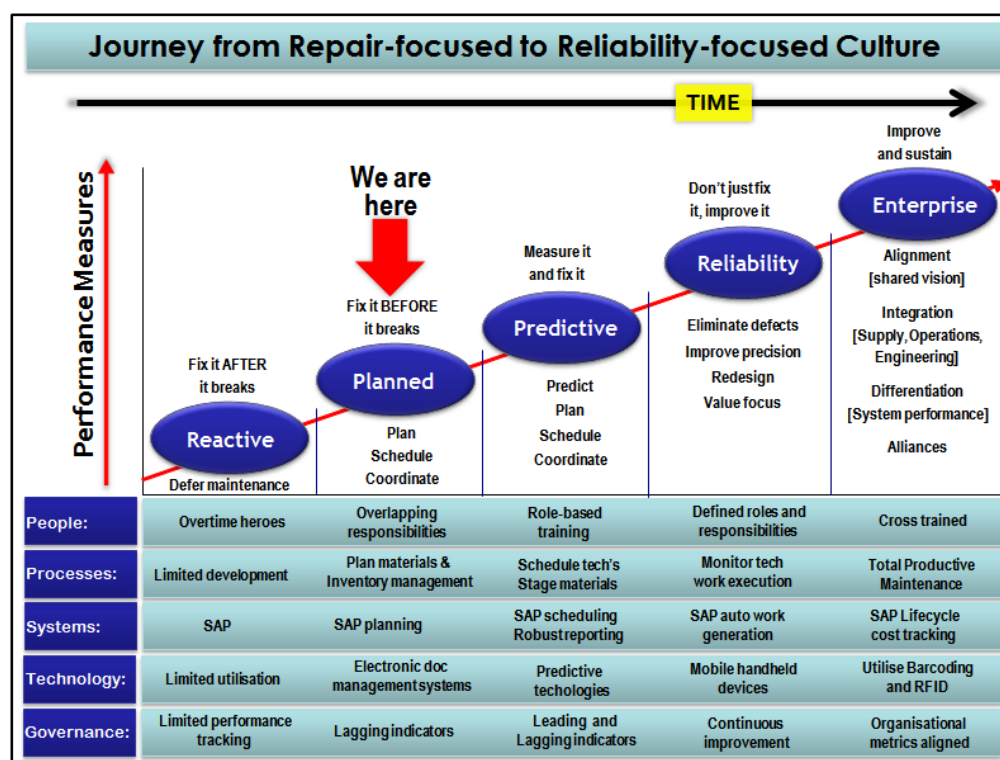


Figure 6: Maintenance Maturity Continuum

The Utility's maintenance paradigm currently still forms part of the "Planned" realm in terms of the Maintenance Maturity Continuum since most of the maintenance is based on an interval-based preventative maintenance philosophy. The aim of the Utility is however to continuously improve and move up the Maintenance Maturity Continuum, as depicted in Figure 6.

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

3. Institutional Review and Optimisation

3.1. Single Point of Management Accountability

The strategy of the City of Cape Town is to continue to evolve the Energy Directorate in to Model 2 noted above where Energy is a Business Unit within the Municipality. Some aspects of Model 2 are already in place, as noted below, it is understood that there are opportunities for enhancement to fully establish the directorate as a business unit. This means that the trading service will have an explicit financial and institutional relationship with the municipality with a single point of accountability for the full municipal energy services value chain.

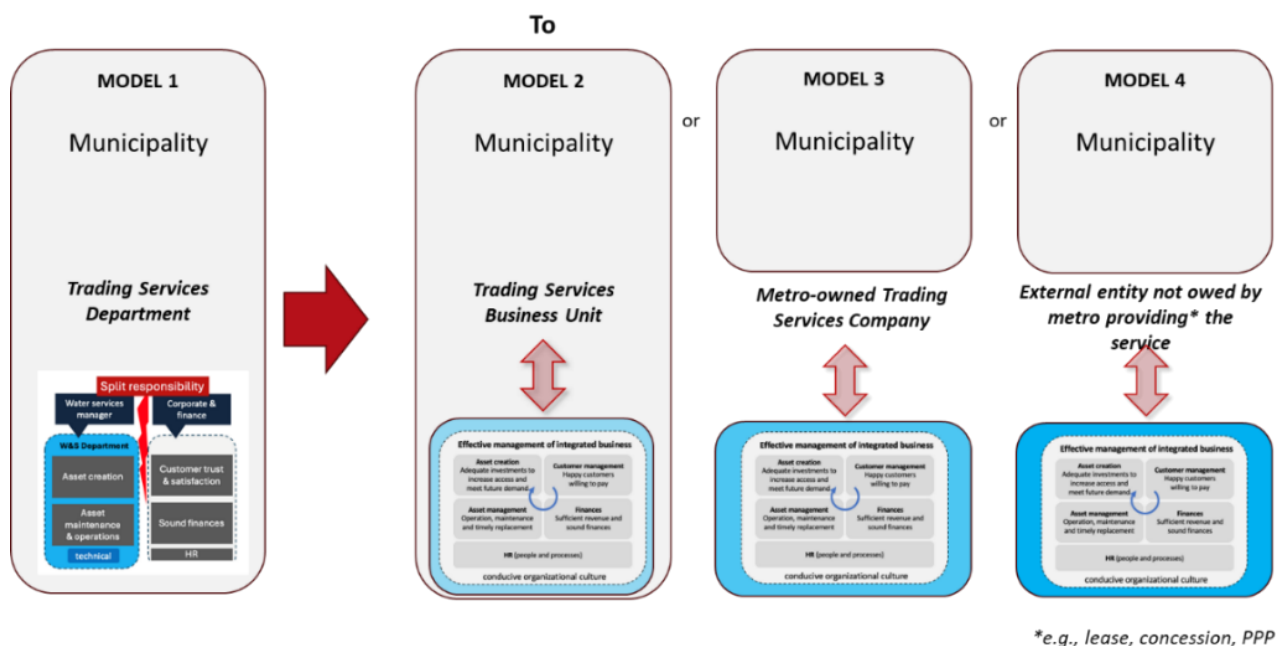


Figure 7: Direction of travel from department to trading service business unit (model 2)(source Guidance Note 3: Institutional arrangements for Turning Around Metro Trading Services)

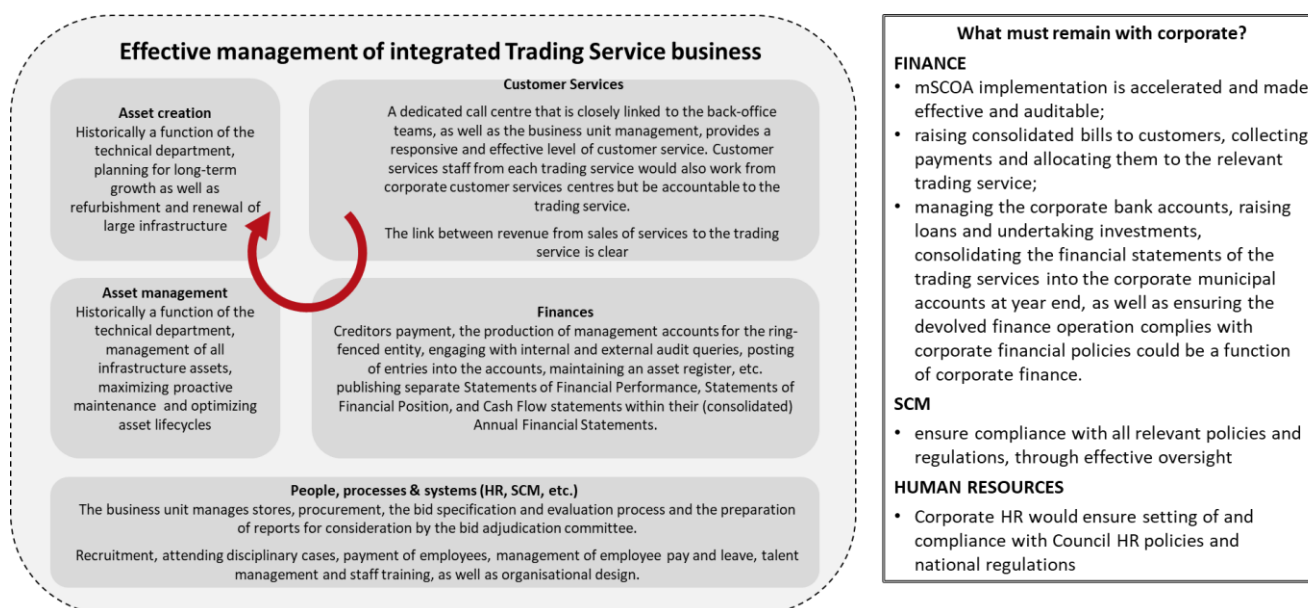


Figure 8: National Treasury's 7-box model

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

This section applies the seven box model, shown in Figure 8, to the current operations of the Energy Directorate in the City of Cape Town. This assists to identify where functions are shared between the trading service and another Directorate in the City or currently held by a corporate service. The City will then map and review the specific functions that are shared or centralised to strengthen accountability of service delivery, to identify solutions for enhancing accountability, and how these functions should operate when the Energy Directorate is established as a Business Unit. Importantly, this analysis and the recommendations for Energy will be harmonised with the City's other trading services. In all items, a detailed assessment will be undertaken to determine what further systems, people and processes are required to ensure the SPoMA.

Table 2: Applying the 7-box model to the City of Cape Town's core electricity utility functions

7 Box Model Category	7 Box Model Category Responsibility / functionality	Assignment of Responsibility as per National Treasury Guidance Note	Current State of Energy Directorate in Cape Town
Accountability	Separate Trading Service	Entity or Business Unit	Separate Directorate <i>Further review required to achieve SPoMA</i>
	Reports to Accounting Officer for business unit (City Manager)	Business Unit Head	Executive Director: Energy
	Political Oversight	Business Unit Specific	Energy Portfolio Committee Mayoral Committee Member for Energy
	Full trading service operations reports to Executive Director	Decentralised	Some services are centralised and performed by corporate <i>Further review required to achieve SPoMA</i>
Human Resources	Development of HR policies that are in line with national regulations and develop systems to ensure compliance	(not mentioned in Guidance note)	Corporate
	Ensure compliance with Council HR policies and national regulations.	Corporate	Business Unit
	Responsible for recruitment;	Business Unit	Business Unit
	Attending disciplinary cases;	Business Unit	Business Unit
	Payment of employees;	Business Unit	Corporate <i>Further review required to achieve SPoMA</i>
	Management of employee pay and leave; and	Business Unit	Business Unit
IT, Fleet, Facilities	Talent management and staff training, as well as organisational design.	Business Unit	Business Unit
	Ensure compliance with all relevant policies and regulations, through effective oversight.	Corporate	Corporate
	Manage requirements within policy	Business Unit	Business Unit

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

	Procure, allocate, maintain assets	Business Unit	Business Unit
Customer Services	A dedicated call centre that is closely linked to the back-office teams, as well as the business unit management, provides a responsive and effective level of customer service. Customer services staff from each trading service would also work from corporate customer services centres but be accountable to the trading service.	Business Unit	<p>The City has a centralised call centre, where one of the options is to be directed to specific operators to log electricity faults and queries. The City also has a digital service request form where customers can log specific electricity related faults and service requests. In both these instances, these service requests and faults are routed to the Head: Business Innovation in the Energy Directorate and logged for action and reporting. The ED: Energy is accountable for the responses to these faults and service requests which are tracked and reported to the Energy portfolio Committee and Mayoral Committee member too.</p> <p><i>Further review required to achieve SPoMA</i></p>
Finance	Raising consolidated bills to customers;	Corporate	Corporate
	Managing the corporate bank accounts,	Corporate	Corporate
	Raising loans and undertaking investments;	Corporate	Corporate
	Consolidating the financial statements of the trading services into the corporate municipal accounts at year-end;	Corporate	Corporate
	Ensuring the devolved finance operation complies with corporate financial policies; and	Corporate	Business Unit supported by Corporate
	Publishing full trading services AFS statements annually, and aggregated within metro AFS.	Corporate	Corporate
	Critical revenue value chain functions including meters and metering, and management / oversight of credit control;	Business Unit	<p>Metering and Revenue Protection: Business Unit Credit Control Oversight: Corporate</p> <p><i>Further review required to achieve SPoMA</i></p>
	Creditors payment;	Business Unit	Business Unit authorises payments, corporate maintains the system
	The production of management accounts,	Business Unit	<p>Corporate Accessed by Business Unit through SAP</p> <p><i>Further review required to achieve SPoMA</i></p>

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

	Engaging with internal and external audit queries;	Business Unit	Business Unit
	Posting of entries into the accounts;	Business Unit	Business Unit handles the SAP postings, and oversight responsibility lies with Corporate <i>Further review required to achieve SPoMA</i>
	Maintaining assets registers, etc; and	Business Unit	Business Unit
	Preparation and sign-off of trading service AFS.	Business Unit	Corporate <i>Further review required to achieve SPoMA</i>
Supply Chain Management	Ensure compliance with all relevant policies and regulations, through effective oversight; and	Corporate	Corporate
	Bid Adjudication committee (handling of reports from the trading service).	Corporate	Corporate
	Manage stores;	Business Unit	Corporate Business Unit sets technical requirements (specifications, minimum stock levels, etc) <i>Further review required to achieve SPoMA</i>
	Procurement, (setting up and service); and	Business Unit	Business Unit
	The preparation of reports for consideration by the bid adjudication committee.	Business Unit	Business Unit

To establish the single point of accountability held by the ED: Energy, the Electricity Utility commits to undertaking a review of all shared services and centralised functions, with a particular focus on those noted above for review. The Electricity Utility will review these services, processes, and functions using a framework for accountability. Where found to not support the establishment of a single point of accountability, an options analysis of different operating models and related recommendations will be taken to the City Manager and the Executive Management Team to consider for implementation. Importantly, the recommendations implemented will be institutionalised through being captured in internal policies, standard operating procedures, and other mechanisms to provide a level of safeguarding these reforms. Regular review will allow the City to continue to enhance and advance accountability and not have it be a once-off reform.

3.2. Financial Transparency

A high degree of financial transparency is currently implemented as it relates to the operations of the electricity trading service and to the relationship between the City and the Trading Service. The City has implemented the Municipal Standard Chart of Accounts (mSCOA) instructions and prepared a separate Electricity Annual Financial statement for the Electricity Utility showing full income and expenses. This is provided for the year ending 30 June 2024 as Annexure A1.1 of this Institutional

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Roadmap. The consolidated Annual Financial Statements for the 2023/24 financial year is currently in the AGSA audit process.

Financial Transparency is further demonstrated through the following:

- Revenue collected for Electricity Utility by the City's Revenue Department is ring-fenced for exclusive use by the utility. Once collected, revenue is allocated to an Electricity Profit Centre and coded division 01 accordingly. There are also allocation rules that govern debt collection from customers.
- The City has completed a Cost of Supply Study and submitted it to NERSA for the past 3 financial years. This study demonstrates financial transparency of the utility, while also supporting the implementation of increasingly cost reflective tariffs for enhanced financial sustainability as will be unpacked in Annexure A2: Business and Investment Plan.
- The Electricity Trading Service pays an agreed (cost driver) recharge rate for corporate and shared services that is funded from the tariff.

Numerous measures have been put in place to improve the effectiveness and efficiency of corporate services - this is an ongoing exercise in the City. In this ongoing process to improve financial transparency, solvency and sustainability, the Electricity Utility will place scrutiny on corporate charges, fees, the equitable share and other similar financial transactions. The Electricity Utility will also assess services from the other City directorates to determine whether they provide Value-for-Money.

To enhance financial transparency for the Electricity Trading Service in the City, this plan proposes to undertake the following:

- The implementation of an independently audited annual financial statement for the Energy Business Unit.
- Review existing financial agreements for recharge rates to confirm value for money.
- Review of appropriateness of cost drivers.
- Review service levels to ensure fit for purpose.

4. Functional Review and Restructuring

As noted in Annexure A: Electricity Trading Service Reform Strategy, the City's electricity utility intends to operate as Model 2 outlined in the National Treasury's guidance notes.

The Electricity Utility is a distinct directorate in the City with its own ED that reports directly to the City Manager and with its own manager for finance that oversees the financial and commercial operations.

The City overall, inclusive of the Electricity Utility, has received a clean audit from the Auditor General of South Africa (AGSA) for the past few years. This indicates a high degree of management effectiveness and accountability, along with sound financial performance. These clean audits are a

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

critical enabler for raising loan finance at concessional rates. The current institutional structure of the Electricity Utility is supportive in raising loans as indicated by the City's loan book.

The current institutional structure operates optimally where the electricity trading service acts as a monopoly. With an increasingly competitive electricity market (both generation and retail), along with other significant changes in the electricity sector, the utility will be restructured to:

- Provide equitable and equal access to the distribution grid for a range of suppliers and off-takers
- Promote financial sustainability through cost-reflective tariffs that are more directly linked to ring-fenced cost centres of different functions
- Limit conflicts of interest and risk exposure in the operation of utility functions

Furthermore, the separation of key utility functions such as grid services, retail, and generation will enhance the financial performance and accountability of each function thereby further supporting long-term financial sustainability and the ability to raise loans for infrastructure investment in the future. With this restructuring, it is possible to reaffirm the appropriate role of the municipal electricity distribution service in the City.

The diagram below indicates the roadmap for the functional review and restructuring to adapt the current structure in the context of a competitive electricity generation and retail environment. Importantly, this process of institutional restructuring will enable enhanced financial sustainability as well as address the enhancements required for National Treasury's Trading Services Reform Programme.

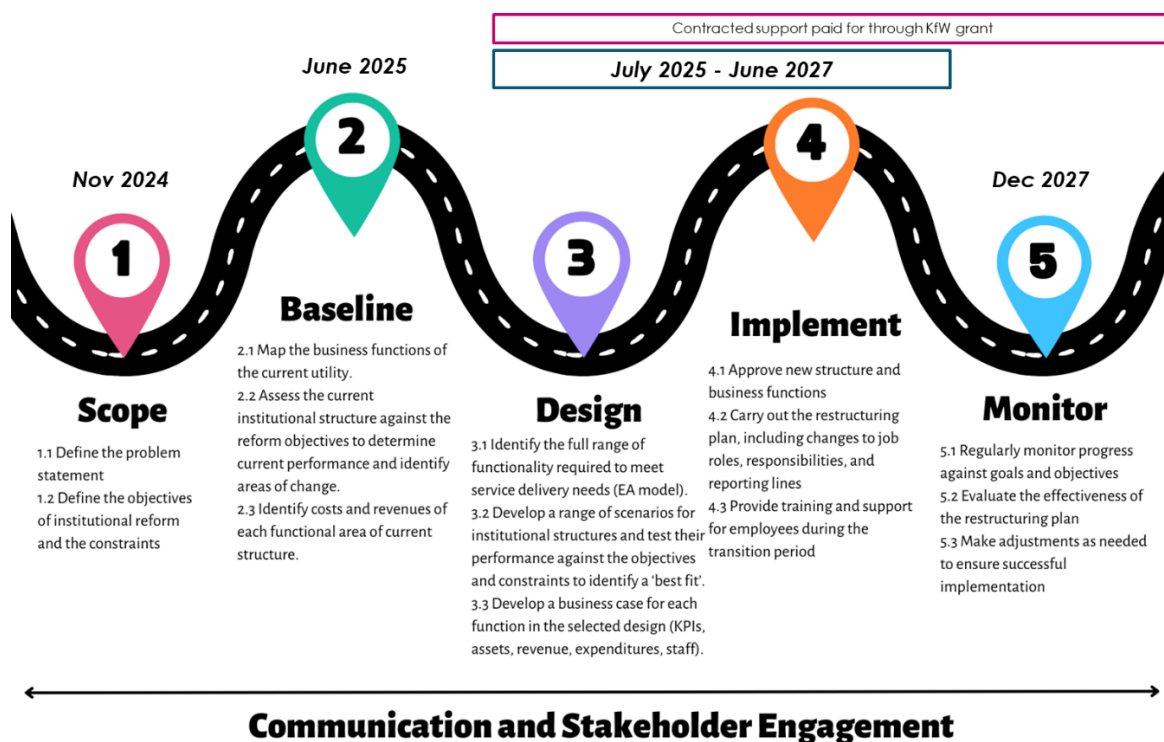


Figure 9: Institutional restructuring roadmap

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Importantly, the process of designing and implementing this updated institutional structure will be iterative. The expectation is that, over a two-year period, the higher order structures will first be defined, i.e. the departmental structures, followed by the branches and then the functional units. This process will also allow for a rationalisation of cross-cutting or shared services within the Utility to enable enhanced operational effectiveness and cost efficiencies of the service.

Effective communication and stakeholder engagement, both within and external to the Electricity Utility, are critical to the implementation of the Utility's institutional restructuring, as shown in Figure 9. It will therefore be undertaken at each stage of this process and led by the HR: BP within the Electricity Utility.

A critical activity currently underway for this institutional restructuring is to map the current enterprise architecture against the functions for a typical utility identified in International Electrotechnical Commission (IEC) / SANS 61968-1:2020, as shown below. With this in place, it is then possible to consider the functional gaps and use this functional layout to guide an optimised institutional structure, so that form follows function.

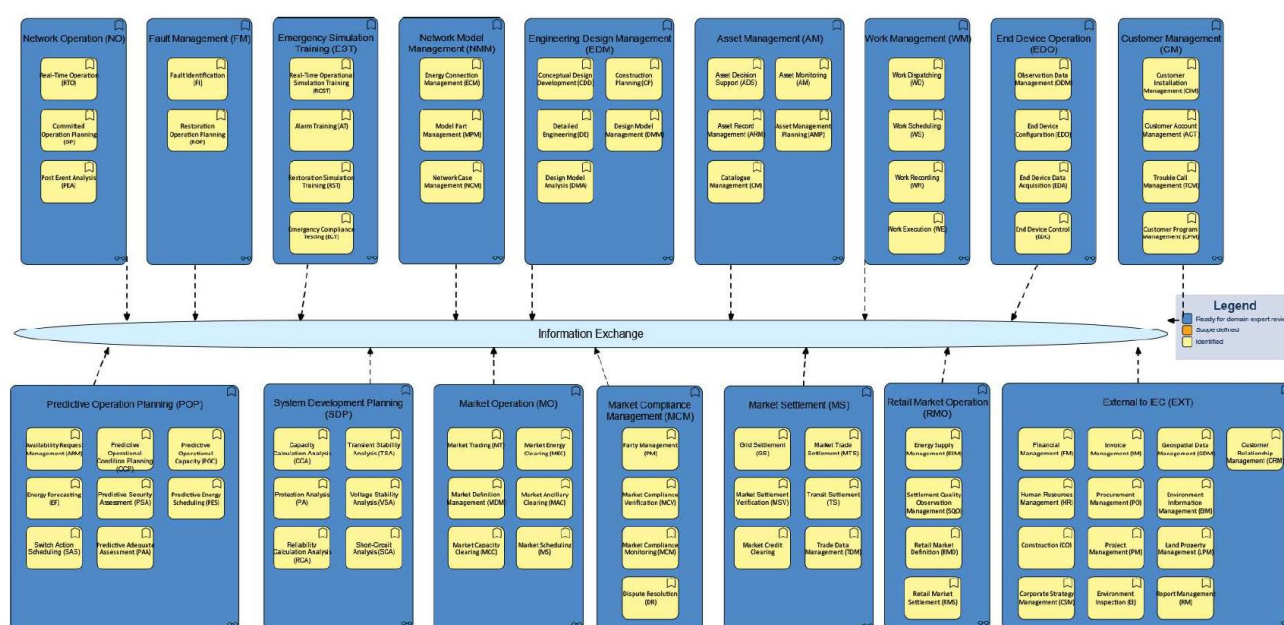


Figure 10: Diagram extract from IEC / SANS 61968-1:2020 showing the range of business functions for an electricity utility

The Electricity Utility is finalising negotiations for a 3-year grant agreement from the Kreditanstalt für Wiederaufbau (KfW) Development Bank to support the functional review and restructuring and the workforce skills and capacity development. This grant will provide additional human and technical resources to support the design, implementation, and change management involved in the restructuring process.

The final phase in this restructuring roadmap is to monitor the design and implementation to assess the effectiveness of the new structure in light of the reform objectives and enable self-correction, as required over time.

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

5. Institutional Roadmap Action Plan

Table 3: Institutional Roadmap for the City of Cape Town's Electricity Utility

Metro Trading Services Reform	Activity	Output	Completed by
Single point of management accountability for the business (incl. revenue & customer management), with effective professional management accountable for performance (with control over essential functions). Additional management capability may be needed (e.g., through management contracts).	Map and review all shared services and functions performed by corporate to understand accountability for delivery and the impact on energy service delivery. Where found to not be supportive of a single point of accountability being established, undertake an analysis of options to correct this that are appropriate to the City's context.	Report that maps and analyses functions in service of energy service delivery Options Analysis List of recommendations for changes required to establish single point of accountability	31 December 2025
	Engage City Manager and Executive Management Team regularly on recommendations for establishing single point of management accountability. This analysis and the recommendations for Energy will be harmonised with the City's other trading services.	Establish working group for trading service reform with corporate services departments Reports to and engagements with the City Manager and the Executive Management Committee	31 December 2025
	Select and implement recommendations for establishing a single point of management accountability.	Energy Business Unit established Single Point of Management Accountability established	31 December 2026
A fit-for-purpose institutional structure to promote management effectiveness and accountability, and to support	Scope: 1.1 Define the problem statement, as informed by the review above 1.2 Define the objectives of institutional and functional reform and the constraints	Scoping Report	31 December 2025

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Metro Trading Services Reform	Activity	Output	Completed by
sound financial performance (including ability to raise loans).	2.1 Map the business functions of the current utility.	Baseline Report Enterprise Architecture As-is Model and gap analysis report	30 June 2026
	2.2 Assess the current institutional structure against the reform objectives to determine current performance and identify areas of change.		
	2.3 Identify costs and revenues of each functional area of current structure.		
	Design 3.1 Identify the full range of functionality required to meet service delivery needs (EA model). 3.2 Develop a range of scenarios for institutional structures and test their performance against the objectives and constraints to identify a 'best fit'. 3.3 Develop a business case for each function in the selected design (KPIs, assets, revenue, expenditures, staff).	Future-state Enterprise Architecture Model New organogram New cost centre and profit centre diagram	30 June 2026
	Implement 4.1 Approve new structure and business functions 4.2 Carry out the restructuring plan, including changes to job roles, responsibilities, and reporting lines 4.3 Provide training and support for employees during the transition period	Reassigned cost centres, profit centres, and management reporting structures in SAP	30 June 2027
	Monitor	Monitoring and Evaluation Plan	31 Dec 2027

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

Metro Trading Services Reform	Activity	Output	Completed by
	5.1 Regularly monitor progress against goals and objectives 5.2 Evaluate the effectiveness of the restructuring plan 5.3 Make adjustments as needed to ensure successful implementation	Indicators with targets and baselines Monitoring Report Evaluation Assessment	
Clearly defined relationship between the service and the city (1) full financial transparency for the Electricity service; and (2) a clearly defined financial relationship between city and service.	Investigate the implementation of an independently audited financial statement for the Electricity Utility.	Independently audited financial statement for Electricity Utility	30 June 2026
	Review existing financial agreements for recharge rates to confirm value for money.	Cost effectiveness analysis	30 June 2026

Annexure A1 Electricity and Energy Trading Service Reform Strategy: Institutional Roadmap

6. Conclusion

The Electricity Utility has made strides in implementing a Single Point of Management Accountability (SPoMA) governance model. However, it is recognised that there is a need for improvement to mitigate risks and harness opportunities in the changing energy landscape. This shift aligns with the City's broader reform strategy and is essential for ensuring sustainable, efficient and effective electricity services. These improvements include:

- To establish a business unit with a single point of management accountability
- Issuing independently audited financial statement for Electricity Utility
- Restructuring the utility to operate optimally in a competitive generation and retail environment, while providing fair and equal access to the grid.

By addressing these key areas for improvement outlined in this Plan and setting clear targets, the Utility aims to position the Electricity Utility as a model of efficiency, transparency, and continuous improvement.



**CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD**

Annexure A2 Energy and Electricity Trading Service Reform Strategy: Business and Investment Plan

Energy Directorate

October 2024

Please note some confidential content has been redacted to make
this document suitable for public publication.

Annexure A2 Electricity and Energy Trading Service Reform Strategy: Business and Investment Plan

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1. Introduction

This Business and Investment Plan must be read in conjunction with Annexure A: Electricity and Energy Trading Service Reform Strategy approved by Council in October 2024. Further to the Reform Strategy, this document confirms that the Electricity Utility¹ currently holds a sound financial and commercial position. However, there are threats to this position that must be mitigated and opportunities that must be harnessed for long-term financial and commercial sustainability. The focus of this plan is therefore to highlight the activities to enable the City to maintain a sound financial position and continue to provide reliable and cost effective energy services in a changing energy landscape.

¹ In this document, the City of Cape Town's Electricity Utility is also referred to as the Energy Directorate.

Annexure A2 Electricity and Energy Trading Service Reform Strategy: Business and Investment Plan

This Business and Investment Plan demonstrates the electricity utility's project implementation capacity that will support the delivery of services and utility performance improvements for when the performance-based grant is disbursed. Any additional grant funding received will allow the utility to fund capital expenditure at a lower cost to support the affordability of tariffs for customers.

This document contains two main sections:

1. Commercial Plan: highlighting the current revenue and expenditure framework, the trends being experienced, and the City's response to these trends to remain a commercially viable trading service
2. The Capital Investment Pipeline: providing an overview of the project pipeline development process, the 10-year project pipeline and related financial summary, and a description of some of the major and minor projects in this pipeline. Importantly, this section also speaks to the funding strategy for this capital investment pipeline.

The table below outlines where the criteria for this Business and Investment Plan (B&IP) are addressed.

Table 1: Table showing alignment between Trading Services Reform Programme criteria and the document contents

	Criterion	Comment/Question	Section in Document
1	Do the Energy B&IPs include commercial plans?	<ul style="list-style-type: none"> • Are there commercial plans (customer relations, billing, collection, financials), tariff structuring, etc. which contribute towards trading services operational effectiveness and financial solvency. • Are there indications of how the commercial and social challenges (billing and collection, etc.) will be addressed? 	Commercial Plan
2	Do the Energy B&IPs include appropriate capital investment plans?	<ul style="list-style-type: none"> • Are there indications of specific and prioritised engineering and capital infrastructure projects (sanitation improvements, NRW reduction, etc.)? • Do they contribute towards trading services operational effectiveness and financial solvency (loss-reducing or surplus-increasing investments)? • Is there a provisional capex and infrastructure plan (5-year plan, 10-year perspective)? 	Capital Investment Plan: Project Pipeline
3	Do the Energy B&IPs show metro commitment and urgency how they will be funded?	<ul style="list-style-type: none"> • Are there indications of increased allocation of capital funds • Are there indications of increased use of private and development finance and expertise (to supplement declining public sector resources). 	Capital Investment Plan: Funding Strategy
4	Do the Energy B&IPs show the necessary project implementation capacity?	<ul style="list-style-type: none"> • Is there an indication of the previous history of ability to implement & spend? • Are there plans to supplement project implementation capacity? • Are implementation timelines provided? 	Capital Investment Plan: Project Implementation Capacity
5	Do the Energy B&IPs collectively show a path towards operational effectiveness and financial solvency?	<ul style="list-style-type: none"> • Is there an overall financial summary of the plans submitted? • Is there a tabulation of the expected full financial impact annually (opex, capex, revenues, debt, etc.) • Is there an indication of existing debt levels, projections for the future, and the funding gaps after city budget allocations. 	Capital Investment Plan: Project Pipeline Commercial Plan: Medium Term Budgeting

Annexure A2 Electricity and Energy Trading Service Reform Strategy: Business and Investment Plan

2. Commercial Plan

The Electricity Utility in the City of Cape Town ("the City") operates as a trading service that relies on revenue from electricity tariffs. The Sustainable Energy Markets Department is currently funded by property rates, but this may change with the broader institutional and financial restructuring planned and outlined in this Business and Investment Plan, as well as A1: Institutional Roadmap.

The Commercial Plan aims to sustain the Electricity Utility as a viable business within a changing energy landscape, which requires the follow 'in principle' shifts:

- **Service Shift:** separate the provision of network services, such as use of the grid and distribution system operation, from energy services provision to appropriately charge for and account for the respective revenues and expenditures, as well as secure capital investment.
- **Revenue Shift:** to match variable costs to variable charges and fixed costs to fixed charges
- **Expenditure Shift:** reduce the cost of bulk electricity through supplier diversification and the cost of grid services through increased operational efficiencies and risk mitigation
- **Funding Shift:** Pursue consistent contribution to the capital replacement reserve to reduce interest payments on capital investments and pursue concessional interest rates by demonstrating alignment of project portfolio with goals of development finance institutions

2.1. Overview of revenue and expenditure

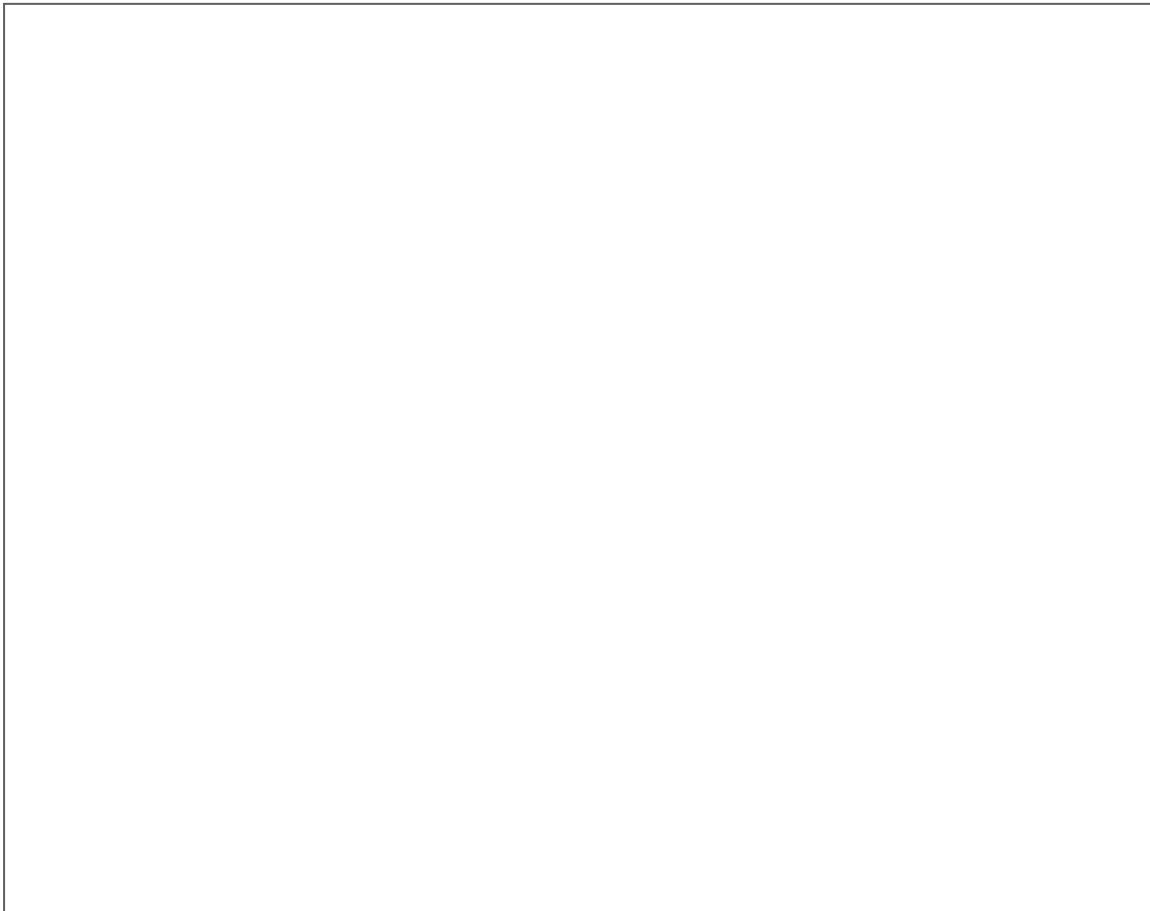


Figure 1: Financial flows of the electricity utility in the City of Cape Town – revenue on the left and expenditure on the right.

Annexure A2 Electricity and Energy Trading Service Reform Strategy: Business and Investment Plan

Most of the expenditure for the Electricity Trading Service is due to Bulk purchases, which is currently electricity purchased from Eskom. Most of the income is from selling electricity to customers via Credit and Prepaid metering. The financial flows are shown in Figure 1. The figure shows that the funding model primarily relies on selling Eskom energy to recuperate a wide range of costs.

By analysing the financial flows, the following insights can be made:

- Income is linked predominately to the sale of energy
- Most of the capital investment is linked to grid maintenance, upgrades and expansions
- Bulk purchase of electricity, Rates contributions, and Employee expenses (salaries & wages) are the most significant expenses

2.2. Revenue Model

In terms of Section 75A of the Local Government Municipal Systems Act (MSA), any fees, charges, or tariffs which a municipality may wish to levy and recover in respect of any function or service of the municipality, must be approved by a resolution passed by the Municipal Council with a supporting vote of a majority of its members. The City's annual budget for each financial year and the proposed electricity tariffs are released for public comment by Council towards the end of March each year.

The **revenue model** considers:

- 1) While population and demand growth is increasing the overall demand for electricity purchased has reduced. This is driven by technological advances, adaptations by consumers, declining economic activity and increasing energy poverty which impact demand directly. Increasingly high electricity prices exacerbate these trends.
- 2) Economic Growth Trends are similar to the above, as the energy input costs in many industries directly drive companies' competitiveness.
- 3) Inflation and above-inflation Eskom bulk purchase increases.
- 4) Customers are making significant investments in alternative energy technologies such as Small-scale Embedded Generation (SSEG), both to mitigate impacts of load-shedding and reduce overall energy costs. This is on the back of significant reductions in demand through investment in demand side management and energy efficient equipment and appliances.
- 5) Service Efficiency gains are considered part of normal business activities to ensure lower tariffs.

Over the past few years, the load-shedding has a negative impact on the overall budget with the electricity utility making a loss in 22/23. This was due to lower than expected sales of electricity due a number of factors such as affordability (indigent users / resident budget limitations) and higher than anticipated frequency and severity of load-shedding. This experienced has further strengthened the argument for tariff restructuring to ensure long term financial sustainability of the electricity utility.

The City's electricity utility has submitted three Cost of Supply studies to the National Energy Regulator of South Africa (NERSA) for consideration. This is used to determine the levels at which cost-reflective tariffs should be set and to quantify subsidies between different categories of consumers. The study is important for the City to properly apply its tariff-setting principles and to quantify the costs involved in

Annexure A2 Electricity and Energy Trading Service Reform Strategy: Business and Investment Plan

rendering the Service, and the subsidies applied. This study is an important informant to the development of an Energy Revenue Model and to define tariff structure and components to support the separation of wires, retail and generation as part of the utility reform process. The following principles, which are in the long-term interests of the electricity consumer in South Africa, inform the annual tariff adjustment process:

- Electricity tariffs will, in the long-term, reflect as closely as possible the underlying costs of supply for the majority of consumers. This will ensure that consumers make rational decisions on electricity consumption, and that the correct levels of resources are, over time, dedicated to electricity supply in South Africa. Considerations of affordability of electricity shall be taken into account, both in the short and longer terms. Tariff structure adjustments shall be introduced in a phased manner, to allow consumers to respond and adjust behaviour accordingly.
- Electricity supply to substantially low-income households will need to be held below full cost-reflective levels in the medium to long term, for social-development reasons. This is a critical element of government policy, and the City will be placed under an explicit regulatory obligation to offer "electricity basic services support tariffs" to poor households.
- Any levies or cross-subsidies will be transparent and the City should provide sufficient information to consumers so that they may understand its purpose.

2.2.1. Grant Funding

The following grants are received annually (as indicated in the Annual Financial Statement provided as an Annexure to A1 Institutional Roadmap):

- Urban Settlements Development Grant: Initial capital investment needed to provide low income households with a connection to the municipal electricity grid – valued at R25.85 million for 2023/24
- Energy Efficiency and Demand-side Management Grant: Capital investment to retrofit municipal facilities to reduce energy demand – valued at R4.6 million for 2023/24
- Equitable Share: Operating expenditure to pay for the energy component of the Free Basic Electricity subsidy disbursed to eligible households – valued at R165 million for 2023/24

2.3. Medium term budgeting

The City undertakes budgeting processes for the medium term to the short term, with increasing levels of detail provided for each, respectively. The table below provides an overview of the budget for the electricity utility as funded by electricity tariffs over the medium term, highlighting projections for revenue and expenditure by source, as well as capital funding sources and debt. This budgeting process incorporates a number of assumptions about the internal City financial situation as well as the broader external environment and the energy sector more specifically. The budget below indicates a commitment to financial sustainability through a balancing of revenue and expenditure by staying within the limits of being a tariff-funded trading service.

Table 2: City of Cape Town Electricity Utility's Draft Macro Operating Revenue and Expenditure Budgets 2025/26, 2025/26, 2026/27, 2027/28 And 2029/30

Subjective Category	24/25 Budget	25/26 Budget	Growth %	26/27 Budget	Growth %	27/28 Budget	Growth %	28/29 Budget	Growth %	29/30 Budget	Growth %
REVENUE											
<u>Sales: External</u>	<u>-21 494 371 718</u>	<u>-24 980 203 457</u>	<u>16.2%</u>	<u>-28 477 355 872</u>	<u>14.0%</u>	<u>-32 266 899 300</u>	<u>13.3%</u>	<u>-34 468 495 443</u>	<u>21.0%</u>	<u>-36 873 712 487</u>	<u>14.3%</u>
Credit Meters	-13 415 663 838	-15 596 546 352	16.3%	-17 782 530 924	14.0%	-20 152 964 847	13.3%	-21 522 674 062	6.8%	-23 018 908 184	7.0%
Prepaid Meters	-7 899 887 013	-9 190 444 696	16.3%	-10 485 897 344	14.1%	-11 892 127 159	13.4%	-12 710 584 611	6.9%	-13 605 314 362	7.0%
Free Basic Electricity	-176 114 693	-190 012 326	7.9%	-205 216 466	8.0%	-217 529 454	6.0%	-230 581 221	6.0%	-244 416 094	6.0%
Public Lighting	-2 706 174	-3 200 083	18.3%	-3 711 138	16.0%	-4 277 840	15.3%	-4 655 549	8.8%	-5 073 847	9.0%
<u>Sales: Internal</u>	<u>-986 664 798</u>	<u>-1 151 543 676</u>	<u>16.7%</u>	<u>-1 326 920 629</u>	<u>15.2%</u>	<u>-1 524 276 868</u>	<u>14.9%</u>	<u>-1 647 281 187</u>	<u>8.1%</u>	<u>-1 775 381 880</u>	<u>7.8%</u>
Municipal	-559 993 879	-647 000 200	15.5%	-741 801 300	14.7%	-849 808 108	14.6%	-913 260 679	7.5%	-975 410 160	6.8%
Street Lighting	-421 193 338	-498 066 171	18.3%	-577 607 595	16.0%	-665 809 962	15.3%	-724 597 187	8.8%	-789 701 720	9.0%
Traffic Lights	-5 477 581	-6 477 305	18.3%	-7 511 734	16.0%	-8 658 798	15.3%	-9 423 321	8.8%	-10 270 000	9.0%
Total Sales	-22 481 036 516	-26 131 747 133	16.2%	-29 804 276 501	14.1%	-33 791 176 168	13.4%	-36 115 776 630	6.9%	-38 649 094 367	7.0%
Miscellaneous Income	-39 204 972	-40 696 772	3.8%	-42 223 274	3.8%	-43 783 021	3.7%	-45 411 395	3.7%	-47 111 420	3.7%
	-22 520 241 488	-26 172 443 905	16.2%	-29 846 499 775	14.0%	-33 834 959 189		-36 161 188 025	21.2%	-38 696 205 787	14.4%
OTHER											
Interest Earned -	-										
Outstanding Debtors	-33 651 240	-33 651 240	0.0%	-33 651 240	0.0%	-33 651 240	0.0%	-33 651 240	0.0%	-33 651 240	0.0%
Grants and Donations	-62 039 980	-59 800 000	-3.6%	-62 072 000	3.8%	-63 830 000	2.8%	-65 974 000	3.4%	-67 648 000	2.5%
(Capital Outlay)											
Developers Contribution	-130 000 000	-135 980 000	4.6%	-142 099 100	4.5%	-148 351 460	4.4%	-154 878 924	4.4%	-161 693 597	4.4%
(BICL)											
Profit on Sale of Assets	-2 500 000	-2 500 000	0.0%	-2 500 000	0.0%	-2 500 000	0.0%	-2 500 000	0.0%	-2 500 000	0.0%
Total Other	-228 191 220	-231 931 240	1.6%	-240 322 340	3.6%	-248 332 700	3.3%	-257 004 164	6.9%	-265 492 837	6.9%
Total Revenue	-22 748 432 708	-26 404 375 145	16.1%	-30 086 822 115	13.9%	-34 083 291 889	13.3%	-36 418 192 189	21.0%	-38 961 698 624	14.3%
EXPENDITURE											
CONTROLLABLE											
Employee Related Costs	1 640 478 554	1 749 251 164	6.6%	1 860 979 637	6.4%	1 987 526 475	6.8%	2 121 711 561	6.8%	2 265 816 343	6.8%
General Expenses	155 749 399	162 255 601	4.2%	168 446 786	3.8%	176 025 382	4.5%	184 360 588	4.7%	193 528 010	5.0%
Fuel	44 683 765	78 683 764	76.1%	78 683 764	0.0%	78 683 764	0.0%	78 683 764	0.0%	78 683 764	0.0%
Connection Fees	1 386 674	1 386 674	0.0%	1 386 674	0.0%	1 386 674	0.0%	134 398 044	9592.1%	1 386 674	-99.0%
Contracted Services	311 408 131	381 822 505	22.6%	266 393 035	-30.2%	272 408 895	2.3%	278 054 605	2.1%	284 326 255	2.3%

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<u>Repairs & Maintenance (Total)</u>	<u>819 263 200</u>	<u>936 949 308</u>	14.4%	<u>975 512 027</u>	<u>4.1%</u>	<u>974 914 557</u>	<u>-0.1%</u>	<u>976 050 798</u>	<u>0.1%</u>	<u>1 018 997 032</u>	<u>4.4%</u>
Repairs & Maintenance (Primary)	405 346 690	503 992 639	24.3%	523 072 308	3.8%	502 567 490	-3.9%	482 920 460	-3.9%	504 168 959	4.4%
Repairs & Maintenance (Secondary)	413 916 510	432 956 669	4.6%	452 439 719	4.5%	472 347 067	4.4%	493 130 338	4.4%	514 828 073	4.4%
Total Controllable	2 972 969 722	3 310 349 016	11.3%	3 351 401 923	1.2%	3 490 945 747		3 773 259 360	12.6%	3 842 738 078	10.1%
<u>OTHER</u>	-										
-	-										
Bulk Purchases	15 472 230 000	18 234 604 000	17.9%	21 118 046 000	15.8%	24 458 255 000	15.8%	26 354 955 000	7.8%	28 398 755 000	7.8%
Collection Costs (Vendors Commission)	71 796 214	72 514 176	1.0%	73 239 318	1.0%	73 971 711	1.0%	74 711 428	1.0%	75 458 542	1.0%
Capital Charges	948 839 130	981 790 134	3.5%	1 032 795 775	5.2%	1 109 178 418	7.4%	1 206 618 685	8.8%	1 303 380 277	8.0%
<u>Contributions</u>	-		0.0%								
Bad Debts											
Provision/Working Capital Reserve	211 868 000	410 869 000	93.9%	468 865 000	14.1%	531 837 000	13.4%	568 553 000	6.9%	608 698 000	7.1%
Medical Aid - Post Retirement	40 856 987	42 736 409	4.6%	44 659 547	4.5%	46 624 567	4.4%	48 676 048	4.4%	50 817 794	4.4%
Grants and Donations	62 039 980	59 800 000	-3.6%	62 072 000	3.8%	63 830 000	2.8%	65 974 000	3.4%	67 648 000	2.5%
Housing fund	-	-		-		-		-		-	
<u>Contribution to CRR</u>	<u>564 829 766</u>	<u>657 644 469</u>	<u>16.4%</u>	<u>758 585 815</u>	<u>15.3%</u>	<u>860 914 835</u>	<u>13.5%</u>	<u>805 382 362</u>	<u>-6.5%</u>	<u>1 027 995 602</u>	<u>27.6%</u>
CRR - Capital projects funding	432 329 766	519 164 469	20.1%	613 986 715	18.3%	710 063 375	15.6%	648 003 438	-8.7%	863 802 005	33.3%
Sale of Assets	2 500 000	2 500 000	0.0%	2 500 000	0.0%	2 500 000	0.0%	2 500 000	0.0%	2 500 000	0.0%
Developers Contributions (BICL)	130 000 000	135 980 000	4.6%	142 099 100	4.5%	148 351 460	4.4%	154 878 924	4.4%	161 693 597	4.4%
Total Other	17 372 460 078	20 459 958 188	17.8%	23 558 263 455	15.1%	27 144 611 531	15.2%	29 124 870 523	23.6%	31 532 753 215	16.2%
<u>INTERNAL</u>	-										
Contribution to Rates	2 118 982 000	2 334 756 000	10.2%	2 515 920 000	7.8%	2 685 892 000	6.8%	2 691 390 000	0.2%	2 688 327 000	-0.1%
Support Services	349 123 707	367 361 791	5.2%	435 086 801	18.4%	451 436 599	3.8%	472 111 872	4.6%	488 256 681	3.4%
Internal Utilities	461 910 889	543 426 327	17.6%	627 706 576	15.5%	721 318 178	14.9%	783 297 900	8.6%	852 657 242	8.9%
Insurance Department Premiums	30 251 664	33 276 830	10.0%	36 604 513	10.0%	40 264 965	10.0%	44 291 461	10.0%	48 720 607	10.0%
Activity Based Costs	- 395 365 351	- 413 552 158	4.6%	- 432 162 003	4.5%	- 451 177 132	4.4%	- 471 028 927	4.4%	- 491 754 199	4.4%
Total Internal	2 564 902 908	2 865 268 790	11.7%	3 183 155 888	11.1%	3 447 734 610	8.3%	3 520 062 306	2.1%	3 586 207 332	1.9%
Total Expenditure	22 910 332 707.7	26 635 575 995	16.3%	30 092 821 266.0	13.0%	34 083 291 888.2	13.3%	36 418 192 189.6	21.0%	38 961 698 624.7	14.3%

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2.4. Key commercial trends

2.4.1. Growth

Electricity Utility revenue is generated based on kWh of electricity sold. Increases in electricity efficiency by customers and the rise in SSEG means that kWh of electricity sold is likely to remain essentially static over the next 20 years. However, expenditure growth is driven by infrastructure expansion and maximum kVA demand. Infrastructure must expand to provide electricity connections to new customers and to accommodate maximum kVA demand. The Electricity Utility assumes that, in line with recent trends, maximum kVA demand will continue to increase in the City despite stagnant kWh consumed.

2.4.2. Need for investment in renewal/refurbishment/maintenance

The need for investment in the refurbishment of infrastructure is a second key trend observed in the budget over the long term. Renewal is capital expenditure required to extend the useful life of assets and keep them functional as they age is a critical maintenance requirement. Under-expenditure on renewal leads to the condition of assets declining and increases the risk of asset failure and supply and distribution degradation. There are 'tipping points' in asset management: the condition and functionality of civil engineering assets declines very little as the first 55% of asset life is used up; however, after that point, condition and functionality begins to decline more rapidly. Once asset failure begins, it proceeds rapidly and irreversibly. The large expansion of medium voltage (MV) and low voltage (LV) networks in the 1990's drove refurbishment costs up as these networks start to reach end of useful life. The City focus will therefore be on a staggered renewal programme to refurbish existing assets from the time that such assets reach 45% of their asset useful life. An inventory, age-analysis and budget prioritisation will therefore drive this process.

2.4.3. Price increases above inflation

The prices of a number of key utility services inputs have increased above inflation in recent years and are expected to continue to do so. This includes the large increases in the bulk purchase price of electricity from Eskom, as well as the cost of security services due to increases in vandalism and attacks on staff in "hot spot" areas. Above inflation increases in salaries and wages are also significant. Salaries and wages are the third largest for Electricity Services after bulk purchases. Salaries and wages are periodically negotiated through SALGA and increases are typically at least a percentage point above inflation. The aforementioned are all beyond the control of the City.

Contribution to rates is the second largest expense, as has been driven primarily by large increases in the bulk purchase price of electricity as it is set as a percentage of revenue. It has been recognised that maintaining the historic 10% level poses a risk to the revenue stability of both electricity and rates services due to the impacts of increasingly high and unaffordable electricity tariffs. There is corporate City agreement that there needs to be phased reduction of the percentage over the medium term.

2.4.4. Stagnant external subsidy environment

The Local Government Equitable Share (LGES) is the only significant revenue source for the tariff-funded Utility Services aside from tariff revenues themselves. National government has been clear that municipalities should not expect real increases in allocations and transfers over the medium term but the number of poor households in the City and thus the need for subsidisation continues to grow. This means

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that the City must increasingly cross-subsidise the cost of providing services for free or below cost to poor households.

2.4.5. Diversification of energy supply by customers and the need for tariff restructuring

The South African Electricity Distribution Industry has and is facing a number of disruptions at present. Load-shedding and the introduction of SSEG have already had a considerable impact on the sales volume of most distributors nationally, and Cape Town is certainly no exception. The industry faces further disruptions over the next few years (short to medium term) from wheeling² and the arrival of the South African Wholesale Energy Market.

These events have, and will continue to, place the financial sustainability of the current licensees under significant threat. It is the considered opinion of the City that unless the tariffs are significantly unbundled and reformed to far better reflect the costs and, critically, the nature of those costs. The Executive Mayor, in a recent letter to the Minister of Energy and Electricity, stated: *"The existing practice of incorporating these fixed charges into the variable tariff is unsustainable, impractical and therefore undesirable"*.

Further to this, Cape Town recently commissioned a study into the potential future impacts of these events on revenues, particularly against the backdrop of the impact on the current set of tariffs. What this study showed was that unless the City made significant changes to their tariff structures, the existing tariffs would need to increase at a rate that would be unaffordable to most. The reason for this is the fact that the tariffs are currently too reliant on recovery of fixed costs through variable charges.

It is also key for events such as SSEG adoption, Wheeling, and the South African Wholesale Market, that tariffs are accurately structured, so that the appropriate costs can be recovered from each of these segments.

2.4.6. Revenue Management

Revenue management focusses on systems that deal with metering, measurements and markets. In the approach to smart metering, the City's Electricity Utility has chosen inter-operability and mature technologies over propriety systems. The City has standardised Advanced metering infrastructure (AMI) for its large user and a segment of small power user customers, and prepayment metering for the remainder of small power users and all residential customers.

The Electricity Utility implemented a Meter Data Unification System (MDUS) as a single head-in system for its various legacy Automatic Meter Reading (AMR) systems. The MDUS hosts all customer's AMI metering data and integrates with the City's SAP enterprise resource planning (ERP) system. AMI meter rollout with Global System for Mobile Communications (GSM) communications to all Large Users (commercial) is complete and time-of-use (TOU) tariffs were implemented from July 2018. An AMI rollout to all Small Users (commercial) is

² Wheeling is the financial transaction representing the transportation of third-party electrical energy (kWh) over the City's/Eskom's distribution/transmission network which allows for the third-party supplier to sell this electrical energy to a City customer at that customer's point of supply. The municipality/Eskom operates in an administrative role to facilitate the transaction between the generators and electricity users.

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underway with some 18 000 small power user AMIs still to be fitted. The rollout forms part of the ongoing AMI Meter Replacement Programme.

AMI metering is also used for residential users with SSEG that have chosen to feed electricity back into the grid. A new more affordable single-phase AMI meter has been introduced but remains as an option and not a requirement for customers that plan to install grid tied SSEG.

Since 2012, the City has been implementing an AMI project within its municipal facilities. The municipality has a stock of about 1 384 facilities and through this project, 893 facilities have had an electricity AMI installed, reaching 64% of facilities with a total of 1247 smart meters, both billing and statistical, covering the larger municipal consumers up to October 2022. The City has planned resources to meter remaining facilities with electricity AMI meters over the next 3-4 years.

The City is also busy with an 8 to 10-year Meter Replacement Project to replace the remaining 80 000 (approx.) residential credit meters with smart ready split prepayment meters. This new technology split prepayment meter that can be smart enabled with the implementation of a communications system. Such implementation will take place only once there is sufficient penetration of these new meters and a proven communications system has been decided upon. Implementation of smart prepayment metering will be prioritised when communication standards mature and become interoperable. This will ensure bi-directional communication which will have many advantages, i.e. early warning of tampering and load management.

The electricity vending system hosts 648 423 pre-paid meters and provides customer service by generating the prepayment tokens that customers purchase and enter into their meters. The number of meters will grow as the population grows in Cape Town and as the current fleet of old mechanical credit meters (conventional) is replaced by prepayment meters.

For the last four (4) years, the focus has been on completing the Token Identifier (TID) rollover before the end of 2024. This included a replacement of all legacy parts of the system as well as legacy meters and upgrading of security protocols and encryption. The upgrades allowed all proprietary encryption hardware to be removed and decommissioned. The Vending system has been upgraded to be STS 6 compliant to allow the TID rollover to be completed.

An additional augmentation to the field applications used by staff accessing the vending system has started to rollout to add GPS location stamps to activities to allow tracking and linking meters to GPS locations over time. Identification of City meters for housing and rentals from customer prepaid meters will prompt arrears collection and separate tracking of tamper cases for City housing areas. Further system integration between vending and the ERP billing system is planned for improved debt recovery, to allow for all City debts to be automatically collected accurately.

2.4.7. Vandalism of Network Infrastructure and Public Lighting

Vandalism of network infrastructure and public lighting is sharply on the increase, resulting in a disruption of and an increase in the cost of electricity services. Although various measures for combating vandalism have been rolled out, the scale of the problem, particularly in high-incident areas, has resulted in instances of extensive service disruption and serious safety concerns for staff and the public alike. The increase in theft

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and vandalism of electricity infrastructure can be further quantified in the exponential grow of expenditure on theft and vandalism for the past five years.

Table 3: Capital and Operational costs related to theft and vandalism, 2019-2023

Table 4: Examples of theft and vandalism in City Supplied Areas

			
Theft and vandalism of MV Overhead lines in Philippi Farms	MV cables theft and vandalism in Montague Gardens- Acacia Park	Theft and vandalism of streetlights in Beacon Valley	Kiosks theft and vandalism in Pelican Park

The impact of theft and vandalism is far reaching:

- Vandalism is generating unnecessary work and expenditure which strains budgets and staff resources.
- Response time to all reported outages is delayed because staff are tied up with vandalism repairs.
- Budgets spent on vandalism could be put to better use by utilising it for equipment up-grade or extension of services.
- Risk to security of supply

Drivers for theft and vandalism of electricity infrastructure include: Metal theft for scrap value, illegal connections driven by lack of access to electricity service, service delivery protests, gang activities and load shedding.

City staff who have to maintain and operate in such areas are at a very realistic risk of being robbed, held at gunpoint, being shot and stoning. Staff fear being raped, harmed, intimidated and repeat incidents, especially if previously involved in similar incidents. The mental well-being of staff is negatively affected by the associated trauma while customers vent their general unhappiness about service delivery at customer

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facing or operational staff. This leads to low staff morale, staff become unwilling to work standby shifts, substance abuse and staff losing pride in their workmanship. There has been a resultant increase in sick leave duration, Compensation for Occupational Injuries and Diseases (COID) claims, staff complacency, desensitised staff and staff fatigue.

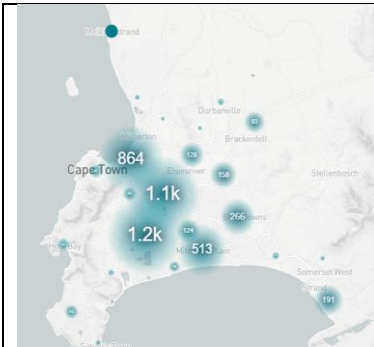
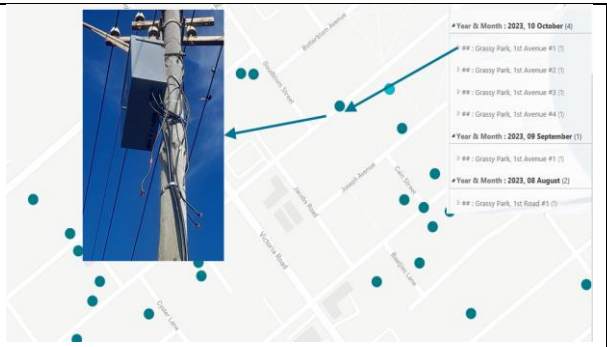
The Electricity Utility is committed to combatting this scourge and its impact on staff through the following interventions:

- Changing of equipment specifications for application in high vandalism areas
- Roll-out of CCTV monitoring and perimeter alarms at substation sites coupled with a rapid response function
- Dedicated law enforcement unit for Energy
- Private Security Patrols
- Alternative lighting solutions for un-electrifiable communities
- Capacitating neighborhood watch groups
- Councilors, Sub-Council and Communities engagement
- Re-opening satellite stores
- Street light pole junction box opening higher on pole
- Encourage staff to make use of EAP services

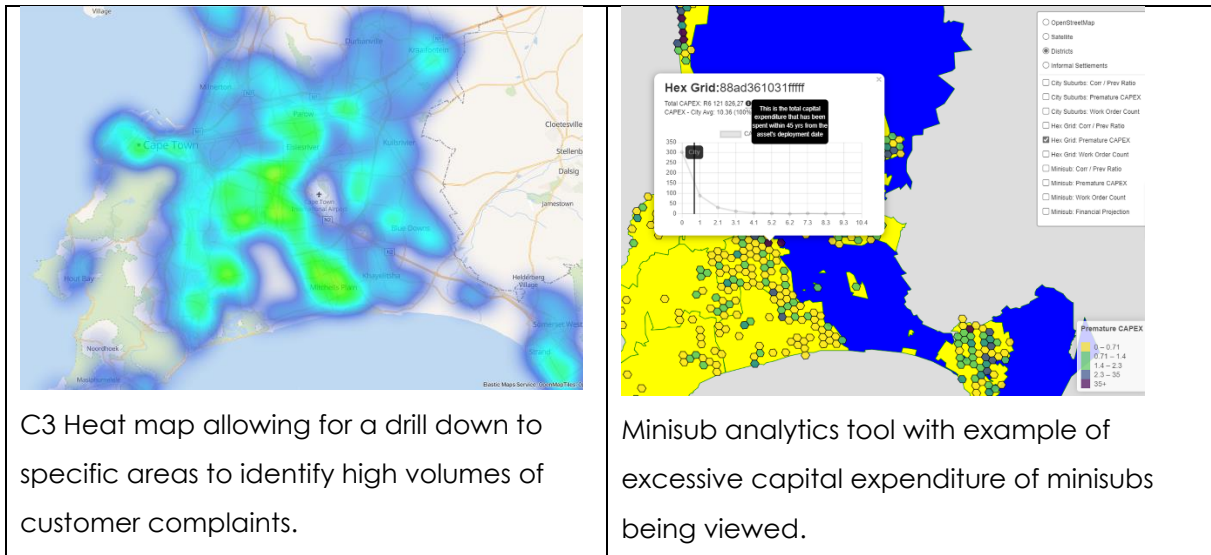
Furthermore, this could include the pooling of resources with other utility services, which are also affected by vandalism. The directorate uses the following tools to monitor theft, vandalism and illegal connections:

- Theft & Vandalism Dashboard
- Illegal connections and vandalism SharePoint site
- C3 Heat map
- Minisub spatial analytics tool

Table 5: Tools to monitor theft, vandalism and illegal connections

 <p>Theft and vandalism map allowing a drill down into specific areas to identify high volumes of theft and vandalism</p>	 <p>Information cross referenced with the Theft and Vandalism SharePoint site</p>
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The Electronic Security Support Services (ESSS) unit works on IOT Cable Theft Solutions with a focus on cable theft and asset tracking. Solutions being implemented include:

- Vibration Sensors – Link Boxes (HV Underground Cables)
- Motion Detection Sensors – Buried HV Underground Cables
- Vibration Sensors – HV Over Head Lines
- Street Lights (Tracking Devices)

To improve effectiveness of solutions a proactive alarm-receiving centre or control room with trained operators is utilised. The solutions have been effective and has seen success in detecting intruders and subsequent dispatch of law enforcement.

Material illegally sourced from vandalised infrastructure often finds its way to waste and scrap metal related businesses. In August 2022 the City submitted comments on the Draft Policy Proposals on Measures to Restrict and Regulate Trade in Ferrous and Non-Ferrous Metals Waste Scrap and Semi-finished Ferrous and Non-ferrous Metal Products to Limit Damage to Infrastructure and the Economy published in Government Gazette 47197. Fifteen general and seventeen specific comments were submitted for consideration by the Mayor's office.

In July 2023, Department Trade, Industry & Competition (DTIC) requested comments to Government Gazette No.49027 which proposes to further Restrict the Export of Semi-Finished Products, Temporarily Prohibit the Export of Used or Second-Hand Rails, and Subject to Export Control.

The City officially submitted comments in August 2023, the City administration -

- repeated a previously submitted view *“that metal theft, and associated activities, is by-and-large a law enforcement problem, and as such, at minimum, necessitated the capacitation of SAPS and the National Prosecuting Authority.”*
- *“supports the intent of the proposed additional measures”*; however, it is sceptical whether *“the measures are sufficient to curb the widespread damage caused by metal-theft in the country, nor targeted enough to tackle criminality without impacting negatively on legal trade.”*

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- further noted that there had been “an increase in cable theft and destruction of infrastructure for scrap since the first round of export restriction were imposed last year.”
- suggested a “broader set of measures targeting high up the value chain than at the point of export be considered in order to achieve more impact in protecting our infrastructure.”

Further to this, the City has established a Metal Theft Unit within the City's Metro Police Service.

2.4.8. Illegal connections

Illegal connections are a growing social problem in some communities where it is creating a safety hazard for the public and accelerating the deterioration of the electricity infrastructure servicing the community. The intention is to develop an illegal connections action plan and to implement routine planned follow-ups in areas with high incidents of illegal connections, seeking to prevent the re-establishment of illegal connections and have a visible presence of law enforcement. Illegal connections often arise from issues related to affordability and the challenge of accessing electricity. The Directorate is committed to exploring innovative solutions to enhance access through electrification and off-grid energy access.

Table 6: Examples of illegal connections

	
<p>Illegal connection removal in Mfuleni (November 2022)</p>	<p>Damage to electrical infrastructure during illegal connection installations (September 2022)</p>

For City supplied areas, the City has undertaken the following interventions:

- Appointed contractor to augment resources – for Electricity Generation and Distribution Areas: East, North and South.
- Initiated routine interventions (aim to have an intervention every week)
- Initiated adhoc community education/awareness interventions (targeting schools)
- Collaborations with other Directorates – Safety and Security (Law Enforcement, Traffic Services), Community Services and Health (Local Clinics) and South African Police Services (SAPS) Public Order Policing (POP) Unit

These interventions are fraught with challenges, including health and safety risks to staff and the public, reconnections after removal of connections, stakeholder unavailability (Police) and the risk of reduced electrification grants (Urban Settlements Development Grant, Informal Settlements Upgrading Partnership Grant (ISUPG)).

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It is part of the City's strategy to eliminate illegal connections as far as possible by electrifying such areas where possible. Illegal connections would be eradicated by electrifying in accordance with the Informal Electrification Process while adhering to the Residential Electricity Reticulation Policy, funded by grant funds (-ISUPG and USDG).

Solutions, still under development include:

- Engagements with SAPS at Strategic/Executive level.
- Electrification of more informal settlements where possible (within the existing policy framework).
- Resolution of land matters.
- Investigations into alternative electrification options e.g. alternative energy - micro grids, free basic alternatives – subject to budget availability household starter packs etc.

2.4.9. Enhanced operational Cost Efficiencies

Interventions to reduce increases in Eskom bulk purchase costs include switching from distribution to transmission points and/or reducing peak electricity demand through investment in batteries and increasing the capacity of Steenbras (main plant refurbishment). Over the past few years, a number of these intake points have been moved to more favourable tariffs and the savings directly passed on to customers in the form of lower tariff increases.

Extending asset life was also implemented to allow for extended payback period and lower monthly debt servicing costs, with the same effect of passing savings directly on to customers in the form of lower tariff increases.

The strategic use of Steenbras Power Station to avoid penalty payments to Eskom for exceeding demand and limit the extent of load shedding and its impacts on the economy allows for a more predictable bulk purchases cost. Steenbras is also used to lower energy demand on the system during the peak period thereby avoiding these peak period costs that would otherwise need to be paid to Eskom.

2.4.10. Wheeling and Use of System Charges

Wheeling is the financial transactions representing the transportation of third party electrical energy (kWh) over the City's distribution network which allows for the third party supplier to sell this electrical energy to a City customer at that customer's point of supply. The sale is governed by a bilateral power purchase agreement (PPA) which exists within a market environment, as opposed to a regulated environment, as the price of the electrical energy is set between the parties and not by either the City or NERSA. To ensure that customers are afforded a choice of supplier of energy which will enable the future state of the market, while being catered for in existing regulation. The Grid code also requires the service provider to allow for wheeling and connection to the electrical network. There is a fair amount of cross-subsidisation and contributions that need to be catered for and it is important that these are not lost.

The City has developed a wheeling model to allow this market environment to function alongside the regulated environment. The design philosophy for the Wheeling Tariffs is based on the separation of energy and other costs and is set at the City's retail energy tariff minus WEPS. This allows for current cross subsidies

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between consumer groups to be maintained. A mechanism to allow customers to green their production is also included.

2.4.11. Eskom Institutional and Tariff Restructuring

Eskom has long noted that its tariff structure is not cost-reflective. Approximately 60% of its costs are fixed (related to administration or capacity) while only around 10% of its revenue is currently generated through fixed charges. It has signalled that it wants to transition to recovering a larger portion of its revenues through fixed charges. This is likely to be associated with its unbundling, as the different businesses (Generation, Transmission and Distribution) have different fixed/variable compositions of cost. How Eskom is permitted to undertake this tariff restructuring – to what degree and within what timeframe – will have a direct impact on the commercial plan. As almost all bulk electricity resold by the City is purchased from Eskom, the municipality will need to appropriately adapt its energy-related tariffs to match and manage Eskom tariff restructuring. Greater policy certainty is required for this transition.

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2.5. Commercial Plan activities

Table 7: Commercial Plan

Metro Trading Services Reform	Summary of current state	Activity	Output	Due Date	Responsible
<p>Turnaround in cash revenue Significant improvement in revenue completeness (metering and billing) and cash collection (enforcement of credit control). This will not be easy in the current economic conditions but is essential.</p>	<p>Implemented and can be enhanced</p>	Enhanced Anti-Theft and Vandalism programme: increased resources for monitoring of and responding to alerts from security devices installed in infrastructure and greater partnership with communities and neighbourhood watches to instil a sense of ownership of infrastructure.	<p>Law Enforcement Enhancement Plan</p> <p>Security System Monitoring Plan</p> <p>Community Engagement Plan</p>	30 June 2026	<p>Manager: Enterprise Asset Management</p> <p>Manager: Infrastructure Operations</p> <p>Manager: Enterprise Retail Management</p>
		Address the technical constraints to applying time-of-use tariffs due to capabilities of the current metering fleet, through exploring options for smart residential metering options, which allow for communication of electricity usage over time.	Cost Benefit Analysis for Time-of-Use Tariffs	30 June 2026	Manager: Finance and Commercial
		Investigate technical and financial feasibility of updated billing software that can handle the increasingly complex nature of retail transitions in the energy system.	<p>Feasibility Assessment</p> <p>Wheeling Pilot</p>	30 June 2029	Manager: Enterprise Retail Management
		Enhance retail functions by optimising the current communication systems for real-time management and metering of the flow of electricity control and allow for increased bi-directional communication with customers over time.	Communication Network Optimisation Analysis	30 June 2027	Manager: Enterprise Retail Management

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Metro Trading Services Reform	Summary of current state	Activity	Output	Due Date	Responsible
A financial surplus is needed to support higher levels of investment through loan finance. Grants are not sufficient to meet investment needs.	Implemented and can be enhanced	Tariff Subsidy Framework review – assessment of targeting criteria and subsidy funding mechanism	Current subsidy analysis report	30 June 2026	Manager: Finance and Commercial
			Research design and intervention to test impact of adjusted tariff subsidy framework		
			Funding and policy proposal for tariff subsidy	30 Dec 2024	Manager: Distribution System Operator
		Enhance operational cost effectiveness: develop assets to provide arbitrage during peaks; establish cost of generation assets, facilitate direct Transmission connections for supply contracts	Generation Plant Costing Model		Manager: Generation Development & Municipal Energy Efficiency
			Battery Energy Storage Programme		Manager: Engineering
			Demand Response Programme		Manager: Enterprise Retail Management
			Updated Eskom Supply Contracts		
		Tariff Restructuring: Introduce and increase network and administration charges, while reducing energy charges and taking account of the ability of different tariff categories to pay.	Updated Tariff Schedule	30 June 2025	Manager: Finance and Commercial
			Updated MTREF and long term financial model of the City		
			Customer insights report, Communications campaign and related resources		
		Utility Financial Model Review – sourcing of revenue and financing for infrastructure investment, including Appropriate revenue collection mechanisms for contribution to rates and public lighting.	Revenue Alignment proposal	30 June 2026	Manager: Finance and Commercial

3. Capital Investment Plan

This section outlines the capital investment plan as it pertains to the 10-year project pipeline and the related funding strategy.

3.1. Project Pipeline

The 10-year capital project pipeline, as extracted from the SAP Portfolio and Project Management System on 8 October 2024, is provided in the Appendix to this document as A2.1. A summary of the pipeline is provided in the below, with a description of the pipeline’s establishment as well as key projects provided in this section.

The 10-year capital project pipeline as it stands, as of 8 October 2024, is valued at approximately R9,15 billion. The pipeline includes small, medium, and large capital lifecycle projects for the creation, enhancement, or replacement of assets and capital purchase items to support operations. This project pipeline also shows the project lifecycle stage in which each project currently stands to give sight of project implementation readiness. A summary of planned annual capital expenditure for this project pipeline is shown below.

Table 8: Approved and planned budget for capital expenditure for the 10-year project pipeline for the City of Cape Town's electricity utility.

The projects captured in this pipeline include investments in the following areas:

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- HV, MV and LV distribution network, such as network rearrangement, substation upgrades, new main substations, new cabling, and new switching stations to name a few,
- Technologies and systems to support operations and management of the grid and its assets
- Battery Energy Storage Systems
- New Energy Generation and energy efficiency projects

It is important to note that the following:

1. The funding for the outer years of this project pipeline is not yet confirmed. This will be further explored in the section below on the funding strategy; and
2. This is not an exhaustive list of all potential projects for the next 10 years, but rather representative of projects that have reach a certain level of maturity and/or are being reviewed in the stage gate process. There are additional projects noted in the Energy Strategy, such as Free Basic Alternative Energy Services, that do not yet have an implementation date and therefore are not noted in is pipeline. Additional grants could assist with projects such as these.

3.1.1. Framework for the initiation of capital projects

All capital expenditure occurs as part of an approved major project or project (unique work breakdown structure(WBS)), or approved programmes and routine programmes (bulk votes).

In Addition to the Corporate Stage Gate Review process, a Capital Investment Committee (CIC) has been established by the Director: Electricity Generation & Distribution (the Director) to assist in evaluating and making recommendations with regards to projects, programmes, and routine programmes. The procedure to get project approval from CIC is documented in the Capital Investment Approval Procedure.

Projects motivated to the CIC for approval are aligned with the South African Distribution Network Code, but utilising the approved standardised equipment and cable sizes. The South African Distribution Network Code states: *"The need to invest must first be decided on technical grounds. All investments must be the least lifecycle cost technically acceptable solution, that is, shall provide for standard supply:*

(a) Minimum quality requirements in terms of NRS 048.

(b) Minimum reliability and operational requirements as determined by this code and by the NERSA."

The Electricity Utility has prepared a standard methodology for performing project life cycle cost analysis documented in Guideline EBZD25: Economic cost justification for infrastructure projects, where technical sound alternatives are considered on the least life cycle cost approach. This methodology considers the total cost to the economy, and not just the utility. The total cost includes, inter alia, acquisition cost (including servitude acquisitions), technical losses, maintenance and operations, cost of unserved energy, decommissioning, and interest during construction. The model calculates the life cycle cost based on a typical project life expectancy of 25 years, except where otherwise dictated by plant useful life or project life expectancy, and works from a NERSA-approved discount rate.

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3.1.2. The conditions / data / indicators that inform project initiation

The initiation of projects is triggered predominantly by equipment age, customer demand, growth in system loading, staff and public safety, and licence compliance.

3.1.2.1. Equipment Age

End-of-lifecycle projects are subject to a condition-based assessment of the equipment to determine the correct time of project initiation and potential extended useful life. Refurbishment or replacement alternatives are considered to determine the least life cycle cost option. Normally for these projects the operations and maintenance cost and cost of unserved energy due to a higher probability of failure and longer outages for the equipment near the end of its useful life provide financial justification for a refurbishment or replacement alternative.

3.1.2.2. Customer demand

Projects are initiated as and when customer applications or large new developments require them. New customers can either originate from Human Settlements Housing delivery plan or Informal settlements plan, for electrification and backyarder customers, or from private industrial, commercial, and residential customer applications. New connections must be accommodated within specified time frames as dictated by NRS 047. New connections are accommodated on existing infrastructure as far as technically sound networks exist. Typically, 90% loading on existing neighbouring main substation footprints will be a trigger for a new main substation due to the load growth of new developments. This is for instance the case with many of the future anticipated new main substations (Airport, Oakland City, Oude Molen, Liesbeek, Culemborg, Wingfield, Ysterplaat, Tygerberg Hospital MS 2, Haasendal, Crammix, Melkbos, Big Bay, Graandendal, Firlands, and 2 X Paardevlei main substations).

3.1.2.3. Growth in system loading

The long lead time required for the construction and financing of the upgrading of new transmission-level infrastructure necessitates reliable load forecasting methodologies.

The Long Term Planning unit in the Transmission System Development section within the Engineering branch of Electricity Utility makes use of a load density (VA/m²) method, a detailed analysis method, and recently the LUM of 2040 to predict load growth on existing main substation footprints. The intention is to initiate projects to develop capacity in time before the plant is overloaded, over-firm, or the reliability of supply requirements is infringed (as per NRS 048). Typically, over-firm networks will have a high cost of unserved energy component providing sufficient financial justification to offset other alternatives with higher initial capital acquisition cost.

On the MV distribution network, there are several technical indicators used to measure feeder group performance. These indicators can at a quick glance indicate which feeder groups might need an improvement or expansion project. Feeder group audits are conducted at the start of each calendar year.

- **Non-firm Capacity (MW):** The maximum load that a feeder group can supply under N-0 (system intact) conditions.

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- **Firm Capacity (MW):** The maximum load that a feeder group can supply under a worst-case N-1 (single contingency) condition.
- **Theoretical Firm Capacity (MW):** The sum of the capacity of the individual feeders making up a feeder group minus the capacity of the feeder with the highest capacity.
- **Current Load (MW):** The existing load supplied by the feeder group.
- **Projected Load (MW):** The projected load supplied by the feeder group at a particular time in the future.
- **Load at Risk (MW):** Current Load - Firm Capacity (applicable to overloaded feeder groups, i.e. with Load at Risk ≥ 0).
- **Growth Potential (MW):** Firm Capacity - Current Load (applicable to feeder groups that are not overloaded, i.e. with Growth Potential ≥ 0).
- **Utilisation Factor (pu or %):** Firm Capacity / Theoretical Firm Capacity.
- **Transfer Capacity (MW):** For each normally-open tie (tie feeder or bus section) to another feeder group, under N-0 (system intact) conditions, the maximum load that can be added to that node before one of the feeders making up the feeder group exceeds its capacity. (The test is done under N-0 conditions because a first contingency is already assumed in the neighbouring feeder group that the tie is connected to.) Note: the transfer capacity cannot exceed the capacity of the tie itself.

3.1.2.4. Staff and Public Safety

Equipment standards, equipment fault rating capacity, risk, and age are the conditions that inform the project initiation based on staff and public safety. Examples of these projects are the Legacy MV switchgear replacement programme performed by the Infrastructure Operations branch of the Electricity Utility.

3.1.2.5. License compliance – Distribution Code and NERSA requirements

Some projects are initiated due to a tariff saving by moving load from the Eskom distribution Medium Voltage (MV) or High Voltage (HV) supply intake points to Eskom's transmission intake points as is the case with the Oakdale PH3, Bellville south Main Station upgrade, Morgen Gronde Switching Station, and Richmond 132/66 kV stepdown and 66 kV Switching Station projects.

Some projects may be required to comply with contractual requirements with Eskom, especially the control of reactive power generated within the City's network. Provision has been made for the procurement of reactors for this purpose, but an agreement has been reached with Eskom to delay this work until such time that the Eskom network is negatively impacted.

While financial sustainability is a crucial consideration, the City is obliged in terms of its licence to provide an electricity supply to all customers within its licensed supply area fairly and equitably.

1.1.1. Major infrastructure projects

This section describes a selection of the major projects envisioned for the next 20 or more years, exceeding R100 million in total project cost and/or considered complex, and is therefore subject to the corporate stage-gate process.

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*1.1.1.1. New infrastructure***Paardevelei 132/66 kV stepdown (CPX.0019989)**

Somerset West Main Station (MS) and Strand MS are currently supplied from Eskom's Lourensrivier substation at 66 kV. Energy is purchased at Eskom's distribution HV tariff. The opportunity exists to supply these main substations from the new Paardevelei SwStn that will enable a transmission tariff if a Paardevelei stepdown substation (132/66 kV) can be established. Project completion is planned for July 2027.

Haasendal MS (CPX.0021379)

The Haasendal and Crammix developments are near each other. Haasendal development has been ongoing from June 2015 when they first applied to the City for power. This network is currently supported from the MV network supplied by Morgen Gronde MS. The site for Haasendal MS was one of the subdivision conditions and will be constructed as Morgen Gronde MS gets close to its firm capacity. This new main substation will be supplied from Morgen Gronde SwStn via 2 x 132 kV cables.

Melkbos MS (CPX.0004796)

Project is under investigation. Will consider rerouting the Melkbos 11kV intake point and the West Coast 11kV intake points to a new Melkbos Main substation.

Grassy Park HV re-arrangement (CPX.0003622)

Once Eskom's new Erica Main Transmission Station (MTS) is commissioned, the Gugulethu and Mitchell's Plain loads will be shifted to Erica MTS. This will reduce the Philippi MTS load to 500 MVA, which is within the firm capacity of the MTS. As the Philippi load grows, more load will have to be shifted to Erica MTS. This will require the Grassy Park 66 kV load to be transferred to Erica MTS. The Directorate considers a Philippi 132kV busbar extension to facilitate the load transfer to Erica MTS. Construction is planned for 2026 – 2029, to align with the commissioning date of Erica MTS.

Ground Mounted PV (Atlantis Solar PV) (CPX.0014782)

The first of the utility-scale projects being planned is a 7MW Groundmounted Photovoltaic (PV) installation at Atlantis. Although a 7 MW project is a relative drop in the ocean when compared to the electricity usage of Cape Town and the City's carbon reduction ambitions, the intention of this project is to act as a catalyst, illustrating the City's commitment to its climate change targets and ultimately paving the way for future project development as well as the attraction of investment into the space. The project is in the construction phase with the bulk of the execution planned for the 2024/2025 and 2025/2026 financial years. Project completion is planned for December 2025.

Ground Mounted PV Project (Paardevelei Solar PV) (CPX.0022992)

The Paardevelei Ground-Mounted PV project is a grid-connected installation, which will be sited in Somerset West on City-owned vacant land. The plant will be connected directly to the City's internal electrical network, which has adequate capacity to absorb between 30 to 60MW of generated electricity. The project is currently in the feasibility stage.

Monte Vista Main Substation (CPX.0037125)

This project is currently being investigated and aims to:

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- Establish a new switching station
- The switching station will supply a 132kV / 66kV stepdown substation which in turn can support the City's 66kV Platteklouf intake from Eskom.
- The Switching station will supply a new main substation, which in turn will supply the Platteklouf 11kV intake point.

There are several distribution tariff savings envisaged with this project, since the new Switching Station will be supplied from an existing Eskom Transmission intake point.

Gugulethu Mitchells Plain Underground 132kV cable (CPX.0029903)

The Gugulethu – Mitchell's Plain 132 kV overhead line (OHL) was constructed in 1975 and supplies the entire Mitchells Plain area. Currently the OHL, is a critical corridor for power transfer between Philippi – Pinotage – Steenbras. Rapid growth of informal settlements coupled with the moratorium on land evasion evictions imposed during the Covid restrictions has resulted in a significant increase of informal dwellings erected under this OHL, inside the registered servitude. In order to resolve the concomitant safety concerns, it is required to reroute and replace this overhead line with underground cables, which will be installed in road reserve.

Philippi & Acacia Reactors (CPX.0009565)

The South African Grid Code (Network Code) specifies that for Distributors a leading power factor shall not be acceptable, unless specifically agreed to in writing with the System Operator. Eskom grants the City permission to operate a leading power factor at the Philippi, Montague Gardens, and Pinotage points of delivery. The infrastructure investment required to install reactive compensation to achieve a lagging power factor is significant. In order to ensure prudent investments, as dictated by the South African Grid Code, the City, Eskom, and the System Operator agreed that the current operating philosophy can prevail, until such point where it becomes problematic to Eskom. Once Eskom requests this compliance, the City will formalise an action plan to install shunt reactors at various points in the City's network.

Acacia – Montague Gardens 132kV cables (CPX.0029589)

The City aims to establish a transmission intake from Eskom's Acacia Main Transmission substation. The City is yet to receive permission from Eskom to establish a new transmission intake from Eskom's Acacia Main Transmission substation.

1.1.1.2. Refurbishment/replacement

Steenbras: Refurbishment of Main Plant (C14.84071)

The project aims to refurbish the Steenbras Pumped Storage Power station in line with the most economically viable plant refurbishment and optimisation scenario identified by the Concept and Viability study that will deliver optimum hydraulic behaviour, an increased dynamic operating range, increased power output, increased efficiency, and optimum residual life. The station will have its four pump turbine units refurbished by redesigning and replacing the turbine-generator units, upgrading the control and instrumentation systems, and refurbishing ancillary sub-systems.

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Figure 2: Steenbras Pumped Storage main plant

Woodstock 132 kV GIS Replacement(CPX.0036714)

The Woodstock 132 kV Gas insulated switchgear is obsolete and spare parts are no longer being manufactured. The project entails the installation of new 132 kV Gas insulated switchgear (GIS) inside the existing Woodstock switching station building, complete with new protection and new direct current (DC) supplies. The new switchgear will require building modifications, 132kV cable jointing and terminations onto the new switchgear. Control plant, multicore cabling and relay panels will also be replaced. Project completion is planned for June 2028.

Steenbras: Concrete ASR Remediation (CPX.0016613)

The project aims to research and develop a remediation method and product for curing the alkali-silica reaction occurring at the penstock anchor block and lower reservoir apron at Steenbras Power Station.

The project will entail a tender for Design – build of civil works for Steenbras Pumped Storage main plant refurbishment. The purpose of this contract is to refurbish the concrete structures of the Steenbras pumped storage main plant to extend the serviceable life of the power station. The current programme envisages the construction phase to start August 2026 until June 2030. Completion is expected in August 2030.

1.1.1.3. Improvement/expansion

Triangle 132kV Upgrade (CPX.0022539)

This project entails upgrading the current Stikland – Triangle, and Stikland – Bellville South 66kV feeders which have exceeded the firm capacities in 2023 to 132kV with new cable feeders from Morgen Gronde Switching Station. The project involves establishing a new 132kV Switching Station at the current Triangle Main substation and replacing the existing 3 X 20 MVA 66kV/11kV transformers with 2 X 50 MVA 132kV/11kV transformers. Project completion is planned for the end of the 2025 calendar year.

Oakdale 132kV Upgrade (CPX.0033912)

This project entails upgrading the current Stikland – Oakdale 66kV feeders to new 132kV cable feeders from Morgen Gronde SwStn. Oakdale SwStn is only operated at 66kV currently and both Oakdale MS and Boston MS transformers are dual-ratio transformers that will unlock 20 MVA additional spare firm capacity at each MS once operated at 132kV. Doordekraal trfrs will be uprated to 2 X 50 MVA (from 3 X 20 MVA before) during the execution of this project. Construction has been postponed due to slow load growth in the affected areas. The project will enter execution once proven to be financially feasible.

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[Weltevreden Switching Station \(CPX.0021376\) and Oaklands City New main substation \(CPX.0004794\)](#)

The Oakland City development will require anything between 80 – 240 MVA. The City is working with the developer and his consultants to determine the best network supply solution. This project is in its infancy stages, and concept designs have not yet been drafted.

[CBD 33kV cable upgrade \(CPX.0021380\)](#)

Several new developments with large power requirements have been identified in Cape Town's Central Business District (CBD). The power requirements for these developments will not only result in the firm capacities of the respective main stations (i.e. Foreshore MS and Woodstock MS) to be exceeded, but will also require significant real estate for cables in the already congested CBD. It is therefore necessary to consider a 33 kV distribution network in the CBD, where customers take supply at 33 kV. This project is very reactive to customer applications and will only be implemented as and when firm customer applications necessitate it and there are financial motivation for it.

[Muizenberg – Clovelly 3rd cable \(CPX.0021363\)](#)

The load forecast for Clovelly SwStn indicates that the load will exceed the firm capacity of the existing cables if a load increase of 14 MVA materialises due to the new Masiphumelele informal settlement. This will require a third cable between Muizenberg and Clovelly SwStns, to ensure firm capacity.

1.1.2.Minor infrastructure projects

This section describes a selection of projects that are between R10 million and R100 million which will be subject to the Directorate stage-gate process.

1.1.2.1. New infrastructure[Mitchells Plain Intake Erica Integration \(CPX.0003621\)](#)

Eskom's Erica MTS is proposed to be built between Mitchell's Plain MS and Gugulethu MS. The City must therefore bring its infrastructure to this new MTS which will be covered by the Mitchell's Plain intake integration project scope. The Mitchell's Plain – Gugulethu OHL will be swung into Erica MTS to form Erica - Mitchell's Plain and Erica - Gugulethu overhead lines. This project's timeline is closely tied to Eskom's timeline for completing Erica MTS, currently expected by 2028.

[MV System Infrastructure – Gugulethu \(CPX.0036499\)](#)

Existing Gugulethu – NY One 4-feeder group was peaking beyond its designed load capacity. The scope of work included the splitting of the existing 4-feeder group and 3-feeder group and the construction of a new primary substation. This will result in the establishment of three firm 3-feeder groups and a single 2-feeder group. Project completion is planned for end FY2025.

[Sun Valley MS \(CPX.0021377\)](#)

The potential Masiphumelele informal settlement development falls within the Sun Valley MS footprint. The neighbouring Clovelly MS has 22.4 MVA spare capacity in 2023. MV primary and secondary links to Clovelly MSs needs to be investigated to determine if load can be transferred to this MS, in order to provide sufficient capacity to supply Masiphumelele informal settlement as and when it develops.

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The 2 X 40 MVA transformers at Sun Valley MS were manufactured in 1995 and are expected to reach its end of life (50 years) and replaced in 2045, but these transformers will be replaced by 2 x 50 MVA to accommodate the Masiphumelele informal settlement development, if the load transfer to Clovelly MS is insufficient.

[Eisleben MS \(CPX.0021362\)](#)

Both Eisleben and Eastridge main substations currently have 40 megavolt ampere (MVA) firm capacity and the transformers will reach their end of life in 2032 and 2027 respectively. According to the City's most recent Land Use Model, Eisleben Drive MS will reach just over 100% firm capacity by 2040. It is therefore recommended that actual load growth is closely monitored to determine if and when it is worthwhile upgrading both MSs to 50 MVA firm. MV load shifting from Eastridge to Eisleben can then be considered to ensure both MS footprints remain within their firm capacity.

[Pelican Park MS Transformer Upgrade \(CPX.0019945\)](#)

Pelican Park MS will exceed its firm capacity due to the Pelican Park Housing Phase 2 development. There are primary and secondary links to both Grassy Park and Spine Road MSs which can be used to transfer load to these Main Substation. The amount of load that can be transferred still needs to be confirmed. Should these load transfers not be sufficient, the Pelican Park transformers will be upgraded to 2 x 50 MVA transformers.

[Gardenia MS \(CPX.0021364\)](#)

The load forecast for Gardenia indicates a load saturation of 20.69 MVA by 2040, with nearly 14 MVA additional residential load to an already predominantly residential load profile. The Gardenia transformers will reach end of life in 2027 at which point they will have to be replaced, subject to a thorough condition assessment. This might be an opportunity to replace the existing 10 MVA transformers with 20 MVA transformers, subject to the residential opportunities being realised. Alternatively, load must be shifted from Gardenia to the surrounding footprints with spare capacity (Grosvenor, expected loading of 75%, or John Dreyer with only expected loading of 49%).

[John Dreyer transformer upgrade \(CPX.0021365\)](#)

The transformers at John Dreyer MS were manufactured in 1977, 1984, and 1984 respectively, and are expected to reach their end of life (50 years) in 2027, 2034, and 2034 respectively. It is proposed to replace these transformers with 2 x 20 MVA units, once a thorough condition assessment indicate actual end of life.

1.1.2.2. Refurbishment/Replacement[Steenbras Power Station Transformer Replacement \(CPX.0016639\)](#)

The project aims to replace 2 X Common Services Transformers and 2 X Station Transformers. The common services transformers (2 MVA, 3.3kV / 400V transformers, 46 yrs old) supply the entire stations 380V and 220V auxiliary equipment required to run the generators and emergency drainage pumps. The station transformers (7.5 MVA, 132 / 3.3kV transformers, 50yrs old) act as both step-up (generation mode) and step-down (pumping mode) transformers to distribute power on the 132kV Steenbras – Paardevelei – Mitchell's Plain – Gugulethu – Philippi corridor. Project to be completed in 2025 financial year.

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Eastridge Main substation (CPX.0004795)

The transformers at Eastridge MS were manufactured in 1982 and are expected to reach its end of life (50 years) in 2032. Due to the aging of the infrastructure, replacement of the equipment is essential. The replacement of the transformers is planned for 2034, but will be subject to a thorough condition assessment to determine whether it is financially viable to replace within 5 years of theoretical end of life. The existing oil cables were also manufactured in 1982, but are still in a good condition and will therefore not require replacement.

1.1.2.3. Improvement/expansion**Outage management system (C12.84078)**

This project entails the implementation of the Outage Management System (OMS) with end-to-end integration into SAP, Supervisory Control and Data Acquisition (SCADA), Advanced Meter Reading (AMR), and GIS. To improve outage response capabilities, the Directorate's OMS implementation aims to provide the following functions:

- Become aware of an outage
- Diagnose and locate outages
- Provide feedback to affected customers
- Dispatch repair crews
- Assist with restoration of electricity services
- Maintain historical records of electrical outages.

Electrification – Nomzamo (CPX.0016626)

This project aims to provide new or an extension to LV, MV, and Public lighting infrastructure required to cater for new or upgraded service connections and to subsidised households in the Nomzamo area. The project has been running for several years, with still 1 057 connections to the beneficiary list at hand that are outstanding. The design has however made provision for a maximum of 1 762 connections for the remainder of the project. First transformer commissioned in September 2023. Security in place at Maitland for the remaining transformer. Project completion is planned for June 2026.

Fisantekraal WWTW - SSEG (CPX.0035682); Athlone WWTW - SSEG (CPX.0035670); Wesfleur WWTW - SSEG (CPX.0035683)

These wastewater treatment plants have either reached capacity or are nearing capacity. The expansion plans for the plants require additional electrical power which can be sourced from embedded generation.

3.2. Funding strategy

The Electricity Utility in the City of Cape Town currently has two revenue sources; property rates fund the Sustainable Energy Markets Department and the majority of the projects undertaken by that department and the electricity tariffs fund the Electricity Generation and Distribution Department and their projects. This is expected to change over time with the whole electricity utility to be almost fully funded through tariffs. The funding sources for the capital requirements of the Electricity Utility are mainly capital replacement reserves (CRR) and External Financing Funding (EFF) as shown in the analysis below.

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Figure 3: Capital expenditure per funding source

The current debt levels are outlined in the Annual Financial Statements, indicating the city's obligations related to debt for the Electricity Utility. Future projections suggest that borrowing levels may increase due to planned capital expenditures, but these investments are anticipated to generate sufficient returns through improved operational efficiencies and revenue generation.

The City has developed a comprehensive funding strategy that balances the affordability of funding with tariff considerations while actively exploring a wide range of financing opportunities to fund the gaps, including support from development banks. Approved capital expenditures funded by loans are being fully financed through this strategy.

When capital expenditure is financed out of the Capital Replacement Reserve (CRR), then transfers to the CRR are made in the previous year, and this shows as an operating expenditure. The impact of Covid-19 on financing has eroded the contribution to the CRR. The intention to re-instate the contribution to CRR as far as possible during the budgeting process will be carefully considered. The CRR funding mechanism which

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relies on contributions has the favourable impact of limiting tariff increases in outer years as the interest payments can be avoided when compared to EFF (external financing fund).

3.2.1.Capital allocation

The share of capital expenditure of the Electricity Utility is displayed in Figure 11 below, the most significant expense is made to infrastructure operations and enterprise asset management, and it mainly pertains to investment in distribution grid infrastructure.

Figure 4: Capital expenditure per branch in the electricity utility

3.2.2.Private and development finance and expertise

The City takes out loans for infrastructure investment based off the City's Annual Financial Statements as a whole. This allows the trading services to benefit from lower interest rates and even concessional interest rates for projects. In particular, the electricity utility has accessed and is negotiating loans from the private finance sector. This includes and, is not limited to, loans for infrastructure from the International Finance Corporation, the KfW Development Bank, and Nedbank.

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The reforms noted in Annexures A, A1, A2 seek to strengthen the governance and financial status of the utility in the context of a changing energy landscape, so that private finance can still be attracted to fund infrastructure investment.

Development Finance Institutions and Donor Agencies are key partners in supporting and financing projects in the City's electricity utility. This is both in the form of concessional financing from the likes of IFC, KfW, and others, but also through grants for technical assistance on project preparation and research. A selection of the financial support received from Development Finance Institutions and Donor Agencies in the past few years is provided below. Expanding the network of partners and the scope of these partnerships is key to the Electricity Utility's funding strategy.

Table 9: Table of projects supported by external donors and partners

Project Description	Funder / Donor
Small-Scale Embedded Generation (SSEG) Municipal Support Programme	GIZ SAGEN/SEA
Grid Impact Assessment Support	GIZ SAGEN/CSIR
Grid Impact Assessment Support	GIZ SAGEN
Secondment of an Embedded Generation Advisor	GIZ SAGEN
Smart Geyser Pilot Project	GIZ SAGEN/Plentify
VVISDP - Implementation Research for solar powered public lighting in informal settlements	Department of Science and Innovation
Embedded Generation Municipal Support Programme	GIZ SAGEN
RE Program Support	USAID/Southern African Energy Programme
Electricity Supply Load-shedding Mitigation And Expansion Planning Report	USAID/Southern African Energy Programme
Socio-economic Cost Benefit Analysis of the City of Cape Town's Embedded Renewable Energy Programme	UKPACT via GreenCape
Urban Resilience Programme Technical Assistance: Data Strategy Implementation	UKFCDO
Planning for Smart Grid to support Alternate Service Delivery	UKPACT via GreenCape
SSEG Technical Analysis Skills Share: Determine how the existing network design standard should be adapted to enable the installation of new networks and ensure compatibility of SSEG in the future.	UK PACT
Advisory support to CCT's Electricity Utility	IFC
Advisory support to CCT's Electricity Utility	IFC
Advisory support to CCT's Electricity Utility	IFC
C40 Energy Poverty Dialogue	C40
Power Purchase Agreement (PPA) Advisory support to CCT's Electricity Utility	CSP
Support regarding Green and Equitable Energy Transitions	Resilient Cities Network
Renewable Energy Accounting	IFC
Green Electricity Market Analysis	C40
Capacity Building Training Initiatives for City staff	GIZ SAGEN - CET II
FBE Optimisation Policy Review	JPAL
Costing the Services of the City of Cape Town's Electricity Generation Business	KfW
Urban Power Energy Hubs	R Cities
Renewable Energy Initiatives	USAID-ESA
Grid integration of IPPs (Advanced Grid Studies)	USAID-Empower Southern Africa (ESA)
Wind Turbine (VAWT and Horizontal Wind Turbine) Pilot	Luvside
Regional Hydro pumped storage	USA Power Africa Programme
Technoeconomic feasibility assessments of Battery Energy Storage Systems (BESS)	USTDA

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Project Description	Funder / Donor
Solar Thermal Pre-feasibility Assessment	SOLTRAIN
Net Zero Energy Innovation	Energy Systems Catapult
Danish Embassy Capacity Building - Study Tours attended by City Staff over the past few years	Danish Embassy
Energy Exemplar Xcellerate Modelling Conference Athens	GIZ SAGEN - CET II
JET Skills Development - Training for City Staff	SALGA
Smart Grid Implementation Roadmap	World Bank ESMAP
Micro-grid pre-feasibility study	GIZ
Utility Reform Embedded Support	KfW
Paardevelei Feasibility Study	C40 CFF
Municipal Energy Efficiency Expansion	IFC
Technical and Economic Analysis of City's Renewable Energy Programme	IFC
Support to embedded renewable energy generation PPA	CSP
Power Futures Lab UCT GSB Finance, Contracts & Risk Mitigation for Private Power Projects Short Course	GIZ SAGEN - CET II
EV Trade Mission to the UK	FCDO/UK Government

National Treasury and other national stakeholders have critical roles to play to enable and support metropolitan municipalities to access these funds. Building on this legacy of partnership with private sector and development finance institutions, the electricity utility looks forward to further engaging National Treasury to explore opportunities to reduce pressure on the national fiscus. This is possible through situating the new performance-based grants within a broader value chain and ecosystem of funding opportunities, such as public-private partnerships and climate finance.

3.2.3. Project Implementation Capacity

The City's Electricity Utility plays a pivotal role in ensuring the delivery of reliable, sustainable, and efficient electricity to its residents and businesses. As urbanisation increases and the demand for energy grows, the utility must not only maintain its existing infrastructure but also innovate and expand its services. This chapter outlines the key components that demonstrate the project implementation capacity of the Electricity Utility, highlighting its achievements, methodologies, and future initiatives.

Track Record of Completed Projects

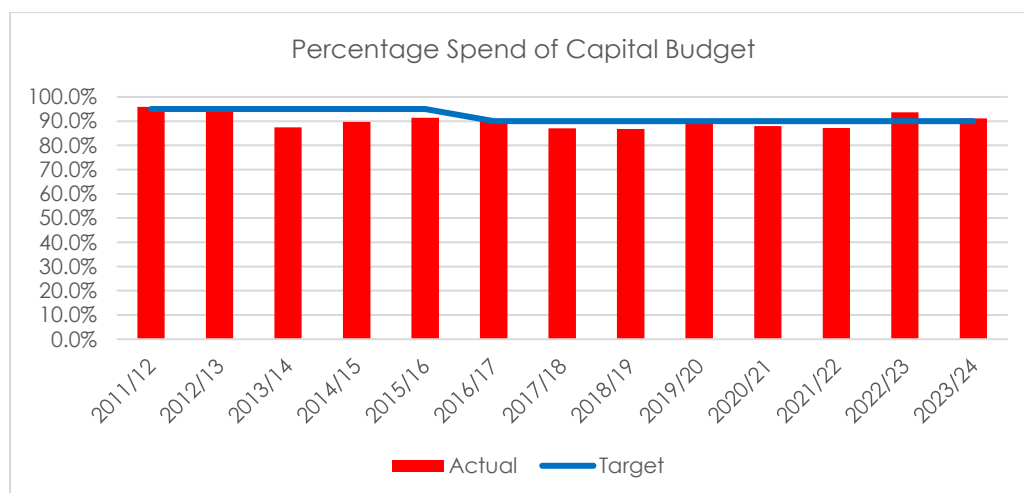


Figure 5: Percentage Capital Spend against the annual target set over time

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The Electricity Utility has a robust portfolio of completed projects that showcase its ability to deliver on time and within budget. This is demonstrated in the high percentage of annual capital budget spent, as shown in Figure 5.

Demand Management and Procurement Plan

The Directorate has a detailed demand plan for all planned procurement during the next three years. The EAM Tender & Contract Administration section within the EGD department provides monthly tender and contract reporting to line management. The demand plan is monitored at the Directorate and Corporate level to ensure commitments made are adhered to and that projects make their way through the procurement process timeously to support continuity of service delivery. To further support this, the City has issued standard processes for demand management, whereby all procurement processes must be initiated 18 months before the Contract Required by Date (CRD). Where the procurement requires a section 33 contract, then the process must be initiated 24 months before CRD. Below is a snapshot of the Directorate's demand plan management dashboard for the current 3-year planning period.

Figure 6: Dashboard Summary of Demand Plan for 24/25, 25/26, and 26/27

Qualified Project Management Team

The effectiveness of the Electricity Utility is bolstered by a skilled project management team. Comprising certified professionals with experience in engineering, finance, and environmental management, the team

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employs internationally recognized methodologies such as PMBOK and Agile. As noted in A1: Institutional Roadmap, the Electricity Utility has a Project Management Office supporting project implementation. Continuous professional development programs ensure that staff stay abreast of the latest trends and technologies in project management.

Standardised Processes and Methodologies

The Electricity Utility has implemented standardised processes for project planning, execution, and monitoring. This forms part of the standardised stage gate review process. These processes include:

- **Project Initiation and Feasibility Studies:** Thorough evaluations assess the technical and economic viability of proposed projects.
- **Project Planning:** Detailed project plans outline timelines, budgets, resources, and risk management strategies.
- **Monitoring and Evaluation:** Regular assessments using KPIs such as project completion rates, budget adherence, and stakeholder satisfaction ensure accountability and transparency.

These standardised methodologies enhance the utility's efficiency and effectiveness in managing multiple projects simultaneously.

Risk Management Framework

A comprehensive risk management framework is integral to the Electricity Utility's project implementation strategy. This framework involves:

- **Risk Identification and Assessment:** Proactive identification of potential risks related to project execution, including financial, operational, and environmental risks.
- **Mitigation Strategies:** Development of tailored strategies to mitigate identified risks, ensuring projects remain on track and within scope.

By employing a systematic approach to risk management, the utility minimises disruptions and enhances project resilience.

Stakeholder Engagement Strategies

Engaging with stakeholders is crucial for the successful implementation of projects. The Electricity Utility actively involves:

- **Community Consultations:** Regular public meetings and workshops gather input from residents and businesses, fostering a sense of ownership and collaboration.
- **Partnerships with Local Organizations:** Collaborations with Non-Governmental Organisations (NGOs) and community groups ensure that projects address local needs and priorities.

This inclusive approach not only strengthens community ties but also enhances project acceptance and success.

Performance Metrics and KPIs

To measure success, the Electricity Directorate tracks a range of performance metrics and Key Performance Indicators (KPIs). These include:

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- Customer Satisfaction Scores: Regular surveys assess public perception and satisfaction with services.
- Energy Loss Ratios: Monitoring energy losses helps identify inefficiencies in the grid and areas for improvement.

By analysing these metrics, the utility can make informed decisions that enhance service quality.

Financial Management and Budgeting

Effective financial management is essential for the successful implementation of projects. The Electricity Utility employs stringent budgeting processes, including:

- Cost-Benefit Analyses: Detailed analyses assess the economic viability of projects, ensuring optimal allocation of resources.
- Transparent Reporting: Regular financial reports are made available to stakeholders, fostering trust and accountability.

This rigorous financial oversight underpins the utility ability to deliver projects on budget and maximize value for money.

Continuous Improvement Programs

The Electricity Utility fosters a culture of continuous improvement through regular reviews and evaluations. This includes:

- Lessons Learned Workshops: After project completion, teams conduct workshops to identify successes and areas for improvement, applying insights to future projects.
- Feedback Mechanisms: Ongoing solicitation of feedback from stakeholders informs iterative improvements to processes and services.

This commitment to learning ensures that the utility remains adaptable and responsive to emerging challenges.

4. Conclusion

The Electricity Utility's financial data, operational plans and policies for the City present a comprehensive approach to enhancing operational effectiveness and financial solvency. With well-defined commercial strategies, targeted capital investments, and a commitment to addressing social and commercial challenges, the plans position the city to improve service delivery while ensuring financial sustainability.

The integration of private, development finance and grants alongside a clear implementation capacity and timelines, underscores the City's commitment to successfully executing these plans. The anticipated financial impacts and projections provide a roadmap for navigating future challenges and opportunities in the energy sector.