



ENERGY AND CLIMATE CHANGE

DIRECTORATE EXECUTIVE SUMMARY OF THE SERVICE DELIVERY AND BUDGET IMPLEMENTATION PLAN 2020/21

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CITY OF CAPE TOWN
ISIXEKO SASEKAPA
STAD KAAPSTAD

Making progress possible. Together.

VISION OF THE CITY

To be an opportunity city that creates an enabling environment for economic growth and job creation, and to provide assistance to those who need it most. To deliver quality services to all residents in line with the City's citizen-centric focus as one of the key principles in delivering its services. To serve the citizens of Cape Town as a well-governed and corruption-free administration.

In pursuit of this vision, the City's mission is as follows:

- ✓ To contribute actively to the development of its environment, human and social capital
- ✓ To offer high-quality services to all who live in, do business in or visit Cape Town as a tourist
- ✓ To be known for its efficient, effective and caring government

This is a one-year plan, giving effect to the IDP and the budget. It sets out the strategies in quantifiable outcomes that will be implemented over the 2020/21 financial year. It considers what was set out in the IDP. It indicates what the Directorate needs to do to deliver on the IDP objectives, how this will be done, what the outcomes will be, what processes will be followed, and what inputs will be used.

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1. EXECUTIVE SUMMARY

This Service Delivery and Budget Implementation Plan (SDBIP) has been developed to align with the five-year Integrated Development Plan (IDP) cycle which commenced in 2017. It will be reviewed on an annual basis as part of the City of Cape Town's annual budget process. The SDBIP should be read in the following context:

- ✓ A Strategic Management Plan (SMP) is developed and reviewed annually to ensure implementation of the business plan.
- ✓ Operational strategies are limited in terms of inclusion in the business plan. These strategies are developed and the impact on the budget is determined.

2. PURPOSE AND SERVICE MANDATE OF THE DIRECTORATE

CORE PURPOSE

- ✓ To build a more resilient, low-carbon and resource-efficient future for Cape Town
- ✓ To ensure sustainable municipal infrastructure and services (energy) that will enable economic development
- ✓ To provide/support equitable access to basic energy services for all citizens of Cape Town
- ✓ The provision of basic energy services to backyarders on Council-owned land as a priority across Cape Town

As part of its business strategy, the Energy and Climate Change Directorate has identified a need to develop a Directorate vision aligned to the City's vision and IDP pillars.



SERVICE MANDATE

The Constitution stipulates that the municipality has a responsibility to support the right of citizens of Cape Town to have access to basic services and to a well-managed, clean and healthy environment. Municipal powers and functions are dealt with in section 156 (schedules 4B and 5B) of the Constitution. Specific functions are contained in schedule 4B pertaining to electricity reticulation, and schedule 5B pertaining to street lighting. The specific functions in these schedules regarding air pollution, building regulations, public transport, and waste disposal are also to be taken into account.

To meet this responsibility, Energy and Climate Change must ensure the provision of effective and reliable energy services through the sustainable management of resources and service delivery infrastructure. The Sustainable Energy Markets (SEM) Department aims to build a more efficient, affordable and sustainable mix of energy services for all Cape Town citizens. A primary task of SEM is to drive the overall reduction in Cape Town's carbon emissions.

The Electricity Generation and Distribution (EGD) Department distributes electricity to residential and commercial/industrial customers in the CCTES supply area. The department is licensed by the National Energy Regulator of South Africa (NERSA) to undertake this function. Under the NERSA licence, the standard of services provided must meet the requirements as set out in the national standards NRS047 and NRS048.

3. STRATEGIC ALIGNMENT TO THE IDP

The alignment of the SDBIP with the Integrated Development Plan (IDP) pillars, Organisational Design and Transformation Programme (ODTP) priorities and programmes is shown below.



	Economic inclusion	EPWP job creation	Skills development (apprentices and learners)				
OPPORTUNITY CITY	Leveraging technology for progress	Programme: Embedded generation	Sustainable mix	Independent power producers	Energy efficiency		
	Position Cape Town as a globally-competitive city					Outage management system	
	Natural resources and environmental sustainability						Programme: Infrastructure investment planning and growth
	Excellence in service delivery						
Mainstream basic services to informal settlements and backyarders							
INCLUSIVE CITY	Efficient, integrated public transport						
	Building integrated communities						
	Dense and transit-oriented growth and development						
WELL-RUN CITY	Operational sustainability	Programme: Energy revenue model					
SAFE CITY	Safe communities	Public lighting					

3.1. STRATEGIES APPROVED BY THE DIRECTORATE

Key Directorate programmes in the IDP:

Programme 1.1.c Infrastructure investment programme	1.1.c.4 Infrastructure maintenance project: - 1.1.c.4 Infrastructure planning for growth
	1.1.c.2 Infrastructure investment research project
Programme 1.3.a Skills investment programme	1.3.a.1 SPV skills development, apprenticeship investment and graduate internship project
1.4.a Energy efficiency and supply programme	1.4.a.1 Independent power producers project
	1.4.a.2 Embedded generation project
	1.4.a.3 Energy efficiency project
1.4.b Climate change programme	1.4.b.2 Mitigation Climate Change Project
Programme 3.1.a Objective 3.1 Excellence in service delivery	Quality of supply
	Quality of service
Programme 3.2.a Basic service delivery programme	3.2.a.1 Encouraging and supporting backyard dwellings/informal settlements - Electrification plan for informal settlements - Backyarder programme
5.1.a Efficient, responsible and sustainable programme	5.1.a.2 Energy revenue model development and reducing energy poverty for the poorest households, while improving energy efficiency

PROGRAMME 1.1.C INFRASTRUCTURE INVESTMENT PROGRAMME

1.1.c.4 Infrastructure maintenance project

1.1.c.4 Infrastructure planning for growth

Electricity infrastructure

Management of legacy medium-voltage switchgear: The City faces serious challenges in the management and maintenance of equipment on the medium-voltage distribution system, mainly due to ageing infrastructure. This applies to all types of medium-voltage switchgear on the system.

The City aims to achieve the following in general:

- ✓ Networks: Develop the high-voltage and medium-voltage networks to ensure reliable electricity supply.
- ✓ Informal settlements: Provide services and upgrades to unserved informal settlements.
- ✓ Network upgrades: Provision for informal and backyarder services will require upgrade or replacement of many networks which are old and inefficient. Refurbishment and replacement of existing assets to achieve balance, cost-efficiency and long-term viability of infrastructure.
- ✓ Identify infrastructure hotspots where enhancement of development rights may need to be limited in the short to medium term, and establish monitoring mechanisms to review their status.
- ✓ Electrification of low-cost housing developments, IS and BY: Electrification in the city in terms of the City and the Western Cape Government (WCG)'s human settlement plans. Facilitate prioritisation of electrical connection backlogs in informal areas serviced by Eskom.
- ✓ A 30-year programme has been initiated, through which all obsolescent medium-voltage switchgear will be replaced with equipment complying with modern best-practice specifications, thereby improving safety and security of supply, as well as reducing maintenance requirements.
- ✓ Low-voltage and medium-voltage distribution network infrastructure: Investment in the medium-voltage distribution network is required, and a new voltage level is being considered to improve efficiencies. Over the next five years, existing substations, underground cables and overhead power lines across the metropolitan area will be upgraded and refurbished as part of a 15-year network development programme.

1.1.c.2 Infrastructure asset management

In 2006, NERSA conducted technical audits of major electricity distributors, including EGD, in which maintenance was highlighted as a major area of concern. Subsequent to this, EGD has embarked on a multi-year programme to implement enterprise asset management (EAM) using the SAP platform and conforming to PAS55 standards. Through the systematisation, standardisation and centralisation of functions, Asset Management will form an integral part of day-to-day activities to create an efficient, predictable and operational environment.

With the transfer of assets from the legacy systems to SAP, not enough time was spent on implementing a comprehensive AMP. The main focus was on financial systems which resulted in a lack of operational focus. Physical asset master data was extremely limited and of poor quality. This led to the need for a total rebuild of SAP EAM (SAP PM - Plant Maintenance Module - and related modules) and to collect and populate asset master data. This work is in progress, with a new master data design and data collection having been completed for distribution MV and LV, 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. Full operationalisation will take place in the medium term.

PROGRAMME 1.3.A SKILLS INVESTMENT PROGRAMME

1.3.a.1 SPV skills development, apprenticeship investment and graduate internship project

Skills development and training is vital to address critical shortages in Cape Town to meet the needs of the organisation and the local economy. Apprenticeship investment in the Electricity Generation and Distribution Department will meet the demand side of the labour market, using the training the City provides to either become skilled technicians employed by government or to move as newly qualified people into the private sector.

PROGRAMME 1.4.A ENERGY EFFICIENCY AND SUPPLY PROGRAMME

1.4.a.1 Independent power producers project

- ✓ Promote and facilitate the implementation of renewable energy generation to keep abreast of national and provincial developments regarding renewable energy, and facilitate the incorporation thereof into City processes.
- ✓ To investigate the possibility of entering into long-term Power Purchase Agreements (PPAs) with Independent Power Producers (IPPs).

1.4.a.2 Embedded generation project

- ✓ Manage the City's small-scale embedded generation (SSEG) programme which enables consumers to connect SSEG to the electrical grid.
- ✓ Promote the finalisation of national technical specifications for the connection of SSEG to utility electrical grids.
- ✓ Establish a PV installer accreditation programme in the absence of a national initiative.

1.4.a.3 Energy efficiency projects

The Directorate aims to continue to promote and implement its energy efficiency programme.

PROGRAMME 1.4.B CLIMATE CHANGE PROGRAMME

1.4.b.2 Mitigation Climate Change Project

The City will aim to reduce Cape Town's carbon footprint in order to contribute to the global reduction of greenhouse gas emissions and make the local economy more competitive. This will be done through the implementation of a range of carbon emission reduction projects in line with the aims of the Energy2040 goals.

PROGRAMME 5.1.A EFFICIENT, RESPONSIBLE AND SUSTAINABLE PROGRAMME

5.1.a.2 Energy revenue model development

The aim is to implement a revenue model that reduces the City's reliance on electricity sales to sustain its operations. As consumers become more energy-efficient and adopt more small-scale embedded generation, the electricity distribution business model needs to change to keep the City's rates account affordable, as well as financially sustainable. The City's electricity tariffs will also need to be constantly reviewed to be increasingly cost reflective, while remaining affordable.

In addition, the opportunities presented by new technologies and renewable energy will be explored to reduce energy poverty for the poorest households, while improving energy efficiency. This will include further investigations into solar geysers and demand-side management, with a special emphasis on informal settlements and backyarders.

PROGRAMME 3.1.A EXCELLENCE IN SERVICE DELIVERY

Quality of supply

The EGD core business is to provide reliable electricity supply to customers in the EGD supply area. To ensure that the quality of electricity supply meets the required regulatory standards, EGD monitors its performance in terms of NERSA guidelines as set out in the NRS 048 part 1 and part 2 documents.

Quality of service

The minimum standards and reporting lines for the quality of service to electricity to customers is set out in the NRS 047 part 1 and part 2 documents. These specifications cover a number of services including customer-driven complaints, enquiries, requests, quotations and forums. The standard response times and satisfaction indices for counter services, telephonic replies and written replies are stipulated in these documents.

Mainstreaming basic service delivery to informal settlements and backyard dwellers

The widespread occurrence of informal settlements and informal dwellings in the yards of houses in formal townships in South Africa is an urban reality. EGD is responsible for the electrification of informal settlements and backyard dwellings within the City of Cape Town supply area, in order for the City to meet its constitutional and statutory obligations to provide basic municipal services, and to afford occupiers of backyard dwellings direct access to the supply of electricity.

Access is undertaken in terms of the City's electrification policy and as part of the EGD electrification plan and backyarder programme, which are funded through the Capital Replacement Reserve (CRR) and the Urban Settlement Development Grant (USDG). Once access to the service has been provided, there is no distinction between the quality of supply and service levels to informal, backyarder and formal residential areas.

Electrification plan for informal settlements

A lack of service connections still exists in the electrification of informal settlements in some areas. At this stage, the bulk of these are found in the portion of the metro which is in the Eskom supply area. Eskom has embarked on the electrification of informal areas which comply in terms of the City's electrification policy. Certain informal areas in both supply areas are excluded in terms of the electrification policies, as dwellings are below the 50-year flood line, are in road, rail and power line reserves and servitudes, or on privately-owned land.

Electrification is an ongoing process as informal settlements grow and will therefore continue over the medium to long term. The electrification plan budget is shown below. It is combined for both informal settlement and formal housing electrification to move funds to match the dynamic environment of informal and subsidised housing provision.

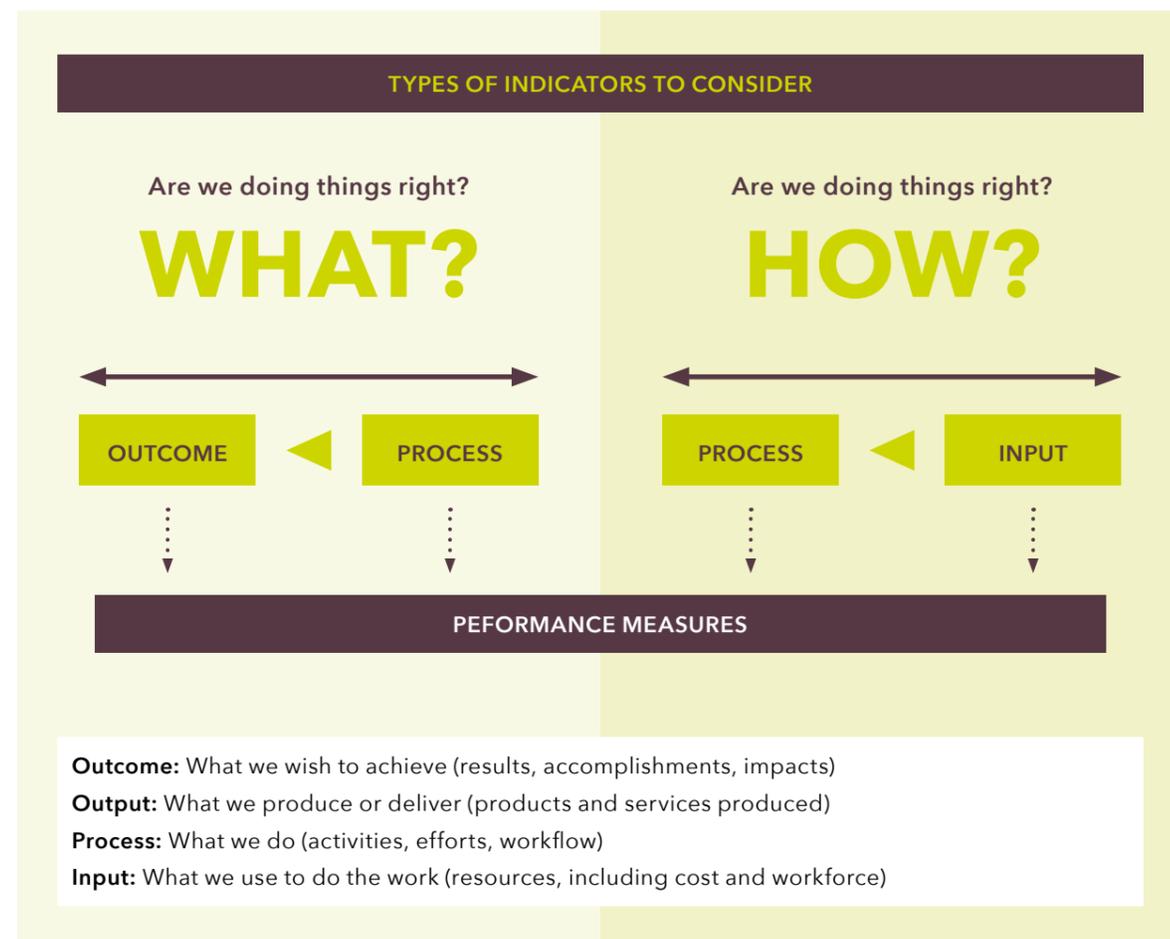
Backyarder programme

Backyarder is a term used to describe where the occupier (owner or tenant) of formal housing has allowed others to establish informal dwellings in the yard of a property. These dwellings do not have direct access to services from the City and are reliant on obtaining these services via the occupier of the formal dwelling.

This project supports the key pillar of the caring city by assisting in alleviating poverty through the provision of subsidised electricity supplies to backyard dwellings, and is guided by considerations of equity, affordability and sustainability. It also supports the shift towards embracing informality and semi-formality. Currently, the programme is restricted to backyard dwellings on City Rental Units within the metro, and the future provision of these services will require major focus and investment with pressure on financial sustainability, as many of the networks are very old, inefficient and often require extensive replacement.

4. PERFORMANCE PROGRESS AND OUTCOMES

3.2. GUIDELINES ON DEVELOPING PERFORMANCE INDICATORS



The combination of the corporate objectives, indicators and targets must meet the 'SMART' criteria, i.e.

- Specific:** state exactly what is to be achieved
- Measurable:** should be capable of measurement
- Achievable:** realistic, given the circumstances and resources
- Relevant:** the indicator must relate logically and directly to the mandate of the Directorate objectives, City's (IDP), (CDS), (EGS and SDS), (MSDF), (TOD) and (TMS) and mandate of the Directorate
- Time-bound:** deadlines within a realistic timeframe

4.1. PAST YEAR'S PERFORMANCE

The past year's information is available in the Annual Report located on the site:
<http://www.capetown.gov.za/local%20and%20communities/meet-the-city/city-reports/annual-reports>

Overall progress on electrification (informal settlements)

Access to electricity – A backlog still exists in informal settlements in the Cape metro area, mainly in the Eskom area of supply. Some households in this category have the added challenge of being located on encumbered land (informal dwellings located either on private land, below the 50-year flood line, under power lines, road or rail reserves, stormwater retention or detention ponds, unstable land, or any other health or safety hazard). To alleviate the backlog, registration of servitudes on privately-owned properties are considered, relocation of structures from land that is not suitable for the provision of electricity to more suitable land, and electrification on road or rail reserves upon permission from the respective business authority. Moreover, the majority of service requests for the provision of informal settlement connections are as a result of infills/new connections resulting from burnt area infills within an existing informal settlement and new pockets.

4.2. AREAS OF BUSINESS IMPROVEMENT

There are a number of service improvement initiatives that will be rolled out over the business plan period. These will include customer campaigns to educate and create awareness amongst electricity consumers regarding various projects, including rationalised electricity tariffs, the cost of the theft of electricity, and of vandalism of electricity infrastructure.

The wheeling, electricity savings and small-scale embedded generation information and behaviour change programmes will be further developed and implemented in order to build a more resource-efficient and lower-carbon future for Cape Town.

The legal position of the City of Cape Town being able to own/purchase green power will be established and the City's way forward mapped.

The sustainable electrification/low-income energy services plan will be developed as a significant contribution to ensuring better services for low-income citizens and to the revision of the electricity revenue model.

5. PARTNERS AND STAKEHOLDERS IN THE STRATEGY PLAN

PARTNER/STAKEHOLDER	NEEDS/ROLES AND RESPONSIBILITIES
<ul style="list-style-type: none"> - Customers - Communities - Business/industry 	Service delivery; electricity distribution; electrification projects; uninterrupted supply; reasonable turnaround time on service requests
<ul style="list-style-type: none"> - Internal partners - Councillors - External service delivery directorates - Corporate - Unions 	Information sharing; communication of Directorate requirements and service standards; policy development and implementation; service co-ordination
<ul style="list-style-type: none"> - External partners - National and Provincial Government - Parastatals - Community-based organisations - Business sector - Sector service authorities - Institutions for higher learning - Non-governmental organisations - Funders - City-to-city partnerships and networks (e.g. C40) 	Information and knowledge management; service delivery co-ordination; implementation; research, compliance with regulatory frameworks; programme and project support; funding (both grant and loan)

6. RESOURCES

6.1. SENIOR MANAGEMENT CAPABILITY AND STRUCTURE

6.1.1. Outsource services

- ✓ Maintenance of public lighting installations
- ✓ Cleaning services: Distribution area: East
- ✓ First line response: Distribution area: North
- ✓ First line response: Distribution area: East
- ✓ Emergency cable jointing and termination services for up to 11kV cables
- ✓ Maintenance of high-mast public lighting installations
- ✓ Low-voltage overhead maintenance and repairs on the City's electricity distribution network
- ✓ Provision of construction works for electrical equipment replacements and installations
- ✓ First line response: Distribution area: South
- ✓ Cleaning of substation grounds and electricity facilities
- ✓ Provision of professional services for electricity services
- ✓ Cleaning services: Distribution area: South

6.1.2. Lead and contributing Directorate

PROGRAMME	PROJECT	LEAD DIRECTORATE	CONTRIBUTING DIRECTORATES
1.4.a Energy efficiency and supply programme	1.4.a.1 Independent power producers project	Energy and Climate Change	Economic Opportunities and Asset Management
	1.4.a.2 Embedded generation project	Energy and Climate Change	Water and Waste Services
	1.4.a.3 Energy efficiency project	Energy and Climate Change	Transport Economic Opportunities and Asset Management Water and Waste Services
1.11 Climate change programme	1.11.2 Mitigation Climate Change Project: Achieving energy and carbon targets	Energy and Climate Change	Transport Water and Waste Services
5.1.a Efficient, responsible and sustainable programme	5.1.a.2 Energy revenue model development and reducing energy poverty for the poorest households, while improving energy efficiency	Energy and Climate Change	Finance

6.2. FINANCIAL INFORMATION

6.2.1. Summary of revenue by source

DESCRIPTION	2016/17	2017/18	2018/19	CURRENT YEAR 2019/20			2020/21 MEDIUM-TERM REVENUE AND EXPENDITURE FRAMEWORK		
				Original Budget	Adjusted Budget	Full-Year Forecast	Budget Year 2020/21	Budget Year +1 2021/22	Budget Year +2 2022/23
R Thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full-Year Forecast	Budget Year 2020/21	Budget Year +1 2021/22	Budget Year +2 2022/23
Operating Revenue By Source									
Property rates	-	-	-	-	-	-	-	-	-
Service charges - electricity revenue	11 763 615	11 810 552	13 042 789	13 623 106	14 044 207	14 044 207	13 789 292	15 484 481	16 740 008
Service charges - water revenue	-	-	-	-	-	-	-	-	-
Service charges - sanitation revenue	-	-	-	-	-	-	-	-	-
Service charges - refuse revenue	-	-	40	-	-	-	-	-	-
Service charges - other	-	-	-	-	-	-	-	-	-
Rental of facilities and equipment	794	1 042	959	1 015	1 015	1 015	1 067	1 120	1 176
Interest earned - external investments	-	-	-	-	-	-	-	-	-
Interest earned - outstanding debtors	21 736	24 402	28 865	27 655	27 655	27 655	27 655	29 591	31 662
Dividends received	-	-	-	-	-	-	-	-	-
Fines, penalties and forfeits	-	17 606	19 930	-	-	-	-	-	-
Licences and permits	-	-	-	-	-	-	-	-	-
Agency services	-	-	265	-	-	-	-	-	-
Transfers and subsidies	4 596	7 394	3 899	874	961	961	950	600	-
Other revenue	129 078	143 752	115 982	103 315	121 398	121 398	30 266	31 774	33 367
Gains	2 979	3 166	1 517	2 500	2 500	2 500	2 500	2 625	2 756
Total Operating Revenue (excluding capital transfers and contributions)	11 922 798	12 007 914	13 214 247	13 758 464	14 197 736	14 197 736	13 851 730	15 550 190	16 808 969

6.2.2. Summary of operating expenditure by type

DESCRIPTION	2016/17	2017/18	2018/19	CURRENT YEAR 2019/20			2020/21 MEDIUM-TERM REVENUE AND EXPENDITURE FRAMEWORK		
				Original Budget	Adjusted Budget	Full-Year Forecast	Budget Year 2020/21	Budget Year +1 2021/22	Budget Year +2 2022/23
R Thousand	Audited Outcome	Audited Outcome	Audited Outcome	Original Budget	Adjusted Budget	Full-Year Forecast	Budget Year 2020/21	Budget Year +1 2021/22	Budget Year +2 2022/23
Expenditure By Type									
Employee related costs	958 398	1 058 234	1 167 216	1 362 574	1 425 431	1 425 431	1 453 129	1 577 025	1 710 382
Remuneration of councillors	-	-	-	-	-	-	-	-	-
Debt impairment	84 156	51 184	17 907	132 851	138 851	138 851	303 535	103 208	111 578
Depreciation & asset impairment	276 116	312 853	359 643	371 608	379 429	379 429	419 097	433 291	459 382
Finance charges	220	156	244	-	-	-	-	-	-
Bulk purchases	8 069 461	7 870 527	8 281 772	9 475 500	9 217 793	9 217 793	9 585 215	10 578 308	11 461 549
Other materials	92 384	92 614	96 337	201 993	152 788	152 788	157 959	165 258	173 028
Contracted services	246 296	267 922	268 596	345 818	295 337	295 337	307 766	324 010	339 109
Transfers and subsidies	-	-	-	-	-	-	-	-	-
Other expenditure	148 830	153 259	161 517	169 925	172 101	172 101	185 294	194 107	201 794
Losses	7 782	3 322	949	450	450	450	450	468	487
Total Operating Expenditure	9 883 643	9 810 072	10 354 181	12 060 720	11 782 180	11 782 180	12 412 445	13 375 675	14 457 309
Surplus/(Deficit)	2 039 155	2 197 842	2 860 066	1 697 745	2 415 556	2 415 556	1 439 285	2 174 515	2 351 660
Transfers and subsidies - capital (monetary allocations) (National / Provincial and District)	115 465	88 776	98 960	74 541	39 101	39 101	44 500	52 411	53 650
Transfers and subsidies - capital (monetary allocations) (Nat / Prov Departm Agencies, Households, Non-profit Institutions, Private Enterprises, Public Corporations, Higher Educ Institutions)	45 412	51 745	37 192	41 700	29 584	29 584	132 705	124 849	135 920
Transfers & subsidies capital in-kind	-	-	-	-	-	-	-	-	-
Surplus/(Deficit) after capital transfers & contributions	2 200 033	2 338 363	2 996 218	1 813 986	2 484 241	2 484 241	1 616 490	2 351 775	2 541 230
Taxation									
Surplus/(Deficit) after taxation	2 200 033	2 338 363	2 996 218	1 813 986	2 484 241	2 484 241	1 616 490	2 351 775	2 541 230
Attributable to minorities									
Surplus/(Deficit) attributable to municipality	2 200 033	2 338 363	2 996 218	1 813 986	2 484 241	2 484 241	1 616 490	2 351 775	2 541 230
Share of surplus/ (deficit) of associate									
Surplus/(Deficit) for the year	2 200 033	2 338 363	2 996 218	1 813 986	2 484 241	2 484 241	1 616 490	2 351 775	2 541 230
Capital Expenditure	1 248 887	1 024 550	749 456	834 094	697 873	697 873	1 049 131	1 043 350	1 156 061

6.2.3. Summary of capital expenditure by type

REVENUE 2020/21	R
External Financing Fund (EFF)	338 784 800
Capital Replacement Reserve (CRR)	604 296 620
Grants and Donations (CGD)	96 000 000
Revenue	10 050 000
	1 049 131 420

6.2.4. Major projects aligned to PPPM (IDP linkage)

PROJECT	STRATEGIC FOCUS AREA	DIRECTORATE OBJECTIVE	IDP PROGRAMME
Electrification	SFA 3: Caring city	Mainstreaming basic service delivery to informal settlements and backyard dwellers	3.2.a Basic service delivery programme
MV switchgear replacement	SFA 3: Caring city	Excellence in service delivery	3.1.a Excellence in service delivery
Meter replacement project	SFA 3: Caring city	Excellence in service delivery	3.1.a Excellence in service delivery
Paardevelei Switching Station	SFA 3: Caring city	Excellence in service delivery	3.1.a Excellence in service delivery
Electricity demand-side management	SFA 1: Opportunity city	Natural resources and environmental sustainability	1.4.a Energy efficiency and supply programme
Street lighting	SFA 1: Opportunity city	Excellence in service delivery	3.1.a Excellence in service delivery

6.2.5. Narrative on Directorate capital programme

Electrification

The provision of subsidised connections to informal settlements. Benefits include increased safety at night, reduces risk of fires through the installation of safe and legal connections; it improves quality of life for beneficiaries and restores human dignity. Approximately R31,4 million will be allocated annually to future electrification projects.

Prepayment meter replacement

A strategic decision was made to accelerate the further rollout of prepayment meters to the remainder of the credit meters. This will result in less administration costs and assist the City with non-electricity debt recovery. This is at an estimated cost of R40 million per year.

Renewable energy and energy efficiency in own operations

The City of Cape Town is leading by example by implementing energy efficiency retrofit programmes within municipal operations since 2009. This includes traffic lights, street lights, buildings and wastewater treatment plant retrofits. The buildings energy efficiency programme is further complemented with rooftop solar photovoltaic systems. This is accompanied by energy management training for facilities' staff, smart driver training for fleet, and behaviour change programmes for building users. The City has also developed an internal resource management protocol for implementation across municipal operations and a resource data management system to track, monitor and report savings and consumption. These interventions have resulted in significant carbon and financial savings and forms part of the City's Energy2040 Goal.

The resource efficiency programme aims to ensure that municipal buildings are equipped with renewable energy, such as photovoltaic (PV) installations, which will save money as the cost of solar is less than Eskom-supplied electricity. Energy security is ensured as solar is a reliable form of energy. The environmental benefit is that the sustainable supply of energy reduces the buildings' overall carbon emissions. This programme forms part of the City's Energy 2040 goals.

The aim of the energy efficiency programme is to upgrade municipal buildings with energy-efficient technology. This will enable reduced electricity consumption, which saves the City money, and reduce maintenance as the technology lasts longer. The environmental benefit is that there a reduction in carbon emissions from the reduced electricity consumption. The improved technology enables the City to upgrade ageing and obsolete technology. This programme forms part of the City's Energy2040 goals.

Street lighting

Street lighting is required across the metro to provide for the safe movement of both vehicular and pedestrian traffic throughout the City. We aim to ensure that the most effective technology is utilised to provide every area of the City with adequate lighting. The department plans to add R44 million of lighting infrastructure to the network on average.

7. RISK ASSESSMENT

Management, with the assistance of the Integrated Risk Management (IRM) Department, have applied their minds and due care has been taken to ensure that risks which could impact on them not achieving the Directorate's objectives are identified, addressed and managed on a day-to-day basis in accordance with the City's approved IRM Policy and IRM Framework.

Risk registers are utilised as a management tool in order to manage identified risks of the Directorate. The risks identified and rated equal to or above the Council-approved risk acceptance level will be reported to the Executive Management Team (EMT). The Executive Director to inform/discuss the Directorate's risks with the relevant Mayoral Committee member on a six-monthly basis.

7.1. REVENUE RISKS

Risks to achieving revenue projections:

- ✓ Security and quality of supply
- ✓ Certain aspects of the economic slowdown are still evident
- ✓ The increase in the indigent register
- ✓ Load-shedding

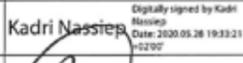
8. OBJECTIVES AND INDICATORS OF THE DIRECTORATE SCORECARD

Key objectives and indicators on the corporate scorecard where Energy is the lead Directorate.

ALIGNMENT TO IDP		LINK TO LEAD DIRECTORATE	CORPORATE OBJECTIVE	INDICATOR (TO INCLUDE UNIT OF MEASURE)	ANNUAL TARGET 2019/20 (30 JUN 2020)	2020/21 (QUARTERLY TARGETS)			
PILLAR	CSC INDICATOR NO.					30 SEPT 2020 Q1	31 DEC 2020 Q2	31 MAR 2021 Q3	30 JUN 2021 Q4
SFA 1: Opportunity city	1.C	Energy	1.1 Positioning Cape Town as a forward-looking, globally-competitive city	Number of outstanding valid applications for commercial electricity services expressed as a percentage of commercial customers	<0,7%	<0,7%	<0,7%	<0,7%	<0,7%
SFA 1: Opportunity city	1.H	Energy	1.4 Natural resources and environmental sustainability	SSEG capacity legally installed and grid-tied	4,0 MVA	1,125 MVA	2,250 MVA	3,375 MVA	4,5 MVA
SFA 3: Caring city	3.D	Energy	3.1 Excellence in service delivery	Number of outstanding valid applications for electricity services expressed as a percentage of total number of billings for the service	<0,4%	<0,3%	<0,3%	<0,3%	<0,3%
SFA 3: Caring city	3.M	Energy	3.2 Mainstreaming of basic service delivery to informal settlements and backyard dwellers	Number of electricity subsidised connections installed	1,500	375	750	1,125	1,500

9. AUTHORISATION

The undersigned do hereby indicate their agreement with the contents of this document and the outcomes.

	Name	Signature	Date
Executive Director	Kadri M. Nassiep	 Kadri Nassiep <small>Digitally signed by Kadri Nassiep Date: 2020.05.28 19:33:21 +02'00'</small>	
Mayco Member	PHINDILE MAXIJI		29-05-2020

10. APPENDICES

Annexure D: 2020/21 Energy and Climate Change Directorate Scorecard

2020/21 ENERGY AND CLIMATE CHANGE DIRECTORATE SCORECARD												
ALIGNMENT TO THE IDP PILLAR, CORP OBJ NO	CORPORATE OBJECTIVE	LINK TO PROGRAMME	INDICATOR REFERENCE NO./CC, CIRCULAR RR, ETC)	LEAD/ILV CONTRIBUTING (C) DIRECTORATE	INDICATOR (TO INCLUDE UNIT OF MEASURE)	BASELINE 2018/19	ANNUAL TARGET 30 JUNE 2020 2019/20	ANNUAL TARGET 30 JUNE 2021 2020/21	TARGETS			RESPONSIBLE PERSON
									30 SEPT 2020	31 DEC 2020	31 MAR 2021	
SFA 1: Opportunity city	1.1 Positioning the City as a forward-looking, globally-competitive City	1.C	Energy and Climate Change (E & CC)	Number of outstanding valid applications for commercial electricity services expressed as a percentage of commercial customers	0,66%	<0,7%	<0,7%	<0,7%	<0,7%	<0,7%	<0,7%	Gary Ross
SFA 1: Opportunity city	1.3 Economic Inclusion	1.3.b	Urban Management	Number of Expanded Public Works Programme (EPWP) work opportunities created	N/A	337	406	406	304	406	406	Maurietta Page
SFA 1: Opportunity city	1.3 Economic Inclusion	1.3.a	Urban Management	Number of full-time equivalent (FTE) work opportunities created	N/A	57	105	105	78	105	105	Maurietta Page
SFA 1: Opportunity city	1.3 Economic Inclusion	KOI 4	Corporate Services	Number of unemployed trainees and unemployed bursary opportunities (excluding apprentices)	22	25	25	25	19	25	25	Mark Denton
SFA 1: Opportunity city	1.3 Economic Inclusion	KOI 5	Corporate Services	Number of unemployed apprentices	197	195	195	195	195	195	195	Mark Denton
SFA 1: Opportunity city	1.3 Economic Inclusion	1.F	Corporate Services	Percentage budget spent on implementation of Workplace Skills Plan (WSP)	95,42%	75%	95%	95%	30%	70%	95%	Gary Ross
SFA 1: Opportunity city	1.4 Natural resources and environmental sustainability	1.4.a	E & CC	Annual measured and verified electricity savings from energy efficiency projects in municipal operations	NEW	850,000 kWh	1 200,000 kWh	1 200,000 kWh	N/A	N/A	1 200,000 kWh	Oliver Stotko
SFA 1: Opportunity city	1.4 Natural resources and environmental sustainability	1.4.a	E & CC	Small-scale embedded generation (SSEG) capacity legally installed and grid-tied measured in megawatt-ampere (MVA)	6,4 MVA	4,0 MVA	4,5 MVA	4,5 MVA	2,250 MVA	3,375 MVA	4,5 MVA	Ismail Jefferies
SFA 1: Opportunity city	1.4 Natural resources and environmental sustainability	1.4.a	E & CC	GWh of electricity purchased to meet electricity consumption target	9 594 GWh	9 306 GWh	9 390 GWh	9 390 GWh	4 819 GWh	7 047 GWh	9 390 GWh	Peter Jaeger
SFA 1: Opportunity city	1.4 Natural resources and environmental sustainability	1.4.a	E & CC	Maximum demand - maximum loading placed on the system transmission network	1 765 MW	1 785 MW	1 755 MW	1 755 MW	1 755 MW	1 755 MW	1 755 MW	Peter Jaeger
SFA 1: Opportunity city	1.4 Natural resources and environmental sustainability	1.4.a	E & CC	Percentage technical and non-technical losses	11,03%	9,30%	9,30%	9,30%	9,30%	9,30%	9,30%	Gary Ross
SFA 3: Caring city	3.1 Excellence in service delivery	3.1.a	Corporate Services	Percentage adherence to Citywide service requests	87,28%	90%	90%	90%	90%	90%	90%	Gary Ross (Gillian Kenhardt/ Pat Lockwood)
SFA 3: Caring city	3.1 Excellence in service delivery	3.D	E & CC	Number of outstanding valid applications for electricity services expressed as a percentage of total number of billings for the service	0,11%	< 0,4%	< 0,3%	< 0,3%	< 0,3%	< 0,3%	< 0,3%	Gary Ross
SFA 3: Caring city	3.1 Excellence in service delivery	3.F	E & CC	Adherence to NRS 047-1:2002 service standards - Quotations to customers	71,87%	95%	95%	95%	N/A	N/A	95%	Ismail Jefferies
SFA 3: Caring city	3.1 Excellence in service delivery	3.F	E & CC	Adherence to NRS 047-1:2002 service standards - Provision of a supply	75,95%	95%	95%	95%	N/A	N/A	95%	Ismail Jefferies
SFA 3: Caring city	3.1 Excellence in service delivery	EE3.3	E & CC	Systems Average Interruption Frequency Index (SAIFI)	0,45 occasions	< 1,3 occasions	< 1,3 occasions	< 1,3 occasions	< 1,3 occasions	< 1,3 occasions	< 1,3 occasions	Peter Jaeger
SFA 3: Caring city	3.1 Excellence in service delivery	EE3.2	E & CC	Customer Average Interruption Duration Index (CAIDI)	3,6 hrs	< 2,3 hrs	< 2,3 hrs	< 2,3 hrs	< 2,3 hrs	< 2,3 hrs	< 2,3 hrs	Peter Jaeger
SFA 3: Caring city	3.1 Excellence in service delivery	EE3.1	E & CC	HV + MV System Average Interruption Duration Index (SAIDI)	1,62 hrs	< 3 hrs	< 3 hrs	< 3 hrs	< 3 hrs	< 3 hrs	< 3 hrs	Peter Jaeger
SFA 3: Caring city	3.1 Excellence in service delivery	EE3.4	E & CC	Customer Average Interruption Frequency Index (CAIFI)	NEW	< 2 occasions	< 2 occasions	< 2 occasions	< 2 occasions	< 2 occasions	< 2 occasions	Peter Jaeger
SFA 3: Caring city	3.1 Excellence in service delivery	EE1.11	E & CC	Number of additional households provided with electricity connections	NEW	No Target - Customer driven	No Target - Customer driven	No Target - Customer driven	No Target - Customer driven	No Target - Customer driven	No Target - Customer driven	Liza Laubscher
SFA 3: Caring city	3.1 Excellence in service delivery	EE1.11	E & CC	Number of additional high mast lights installed	NEW	10	7	0	0	3	7	Shaun Kemp
SFA 3: Caring city	3.1 Excellence in service delivery	EE1.11	E & CC	Number of additional households provided with access to free basic electricity (FBE)	NEW	1500	1500	1500	750	1125	1500	Maurisha Hammer

2020/21 ENERGY AND CLIMATE CHANGE DIRECTORATE SCORECARD												
ALIGNMENT TO THE IDP PILLAR, CORP OBJ NO	CORPORATE OBJECTIVE	LINK TO PROGRAMME	INDICATOR REFERENCE NO./CC, CIRCULAR RR, ETC)	LEAD/ILV CONTRIBUTING (C) DIRECTORATE	INDICATOR (TO INCLUDE UNIT OF MEASURE)	BASELINE 2018/19	ANNUAL TARGET 30 JUNE 2020 2019/20	ANNUAL TARGET 30 JUNE 2021 2020/21	TARGETS			RESPONSIBLE PERSON
									30 SEPT 2020	31 DEC 2020	31 MAR 2021	
SFA 3: Caring city	3.1 Excellence in service delivery		E & CC	Number of additional street lights installed	NEW	940	2 929	2 929	1 565	2 630	2 929	Shaun Kemp
SFA 3: Caring city	3.1 Excellence in service delivery		E & CC	Percentage burning rate of all public and street lights	89%	90%	90%	90%	90%	90%	90%	Brinley van der Schyff
SFA 3: Caring city	3.1 Excellence in service delivery		E & CC	Community satisfaction survey (score 1-5) for residents - Energy	2,3	2,5	2,8	2,8	N/A	N/A	2,8	Gary Ross
SFA 3: Caring city	3.2 Mainstreaming basic service delivery to informal settlements and backyard dwellers	3.M	E & CC	Number of subsidised electricity connections installed	2 440	1 500	1 500	1 500	750	1 125	1 500	Maurisha Hammer
SFA 4: Inclusive city	4.3 Building integrated communities	KOI 7	Corporate Services	Percentage adherence to EE target of overall representation by employees from designated groups (see EE Act definition)	NEW	NEW	90%	90%	90%	90%	90%	Gary Ross
SFA 4: Inclusive city	4.3 Building integrated communities	KOI 8	Corporate Services	Percentage adherence to equal or more than 2% of complement for people with disabilities (PWD) in compliance with the EE plan	1,45%	2%	2%	2%	2%	2%	2%	Gary Ross
SFA 4: Inclusive city	4.3 Building integrated communities	KOI 9	Corporate Services	Percentage adherence to EE target (designated) groups employed in the three highest levels of management (NKP)	NEW	74%	74%	74%	74%	74%	74%	Gary Ross
SFA 4: Inclusive city	4.3 Building integrated communities	KOI 10	Corporate Services	Percentage of women employed across all occupational levels in line with the annual EE plan targets	NEW	45%	39,71%	39,71%	39,71%	39,71%	39,71%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	5.C	Finance	Percentage spend of capital budget	84%	90%	90%	90%	36%	64%	90%	Roshan Davids
SFA 5: Well-run city	5.1 Operational Sustainability	5.D	Finance	Percentage spend on repairs and maintenance	94,8%	95%	95%	95%	45,9%	68,7%	95%	Roshan Davids
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 15	Finance	Percentage of operating budget spent	94,3%	95%	95%	95%	44,4%	64,8%	95%	Roshan Davids
SFA 5: Well-run city	5.1 Operational Sustainability		Finance	Revenue collected as a percentage of billed amount	98,6%	98%	99%	99%	99,0%	99,0%	99%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 16	Finance	Percentage of assets verified	81,53%	100%	100%	100%	N/A	N/A	100%	Jason Carelse
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 13	Corporate Services	Percentage Occupational Health and Safety (OHS) investigations completed	0%	100%	100%	100%	100%	100%	100%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 11	Corporate Services	Percentage of absenteeism	4,43%	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%	≤ 5%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 14	Corporate Services	Percentage vacancy rate	8,50%	≤ 7% + percentage turnover rate	≤ 7% + percentage turnover rate	≤ 7% + percentage turnover rate	≤ 7% + percentage turnover rate	≤ 7% + percentage turnover rate	≤ 7% + percentage turnover rate	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 17	Probity	Percentage of declarations of interest completed	100%	100%	100%	100%	25%	50%	100%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 18	Finance	Percentage completion rate of tenders processed as per the demand plan	NEW	NEW	80%	80%	50%	70%	80%	Gary Ross
SFA 5: Well-run city	5.1 Operational Sustainability	KOI 19	Finance	Percentage of external audit actions completed as per audit action plan	NEW	NEW	100%	100%	100%	100%	100%	Gary Ross

AUTHORIZED SIGNATURE
 Kadir Nassief
 DATE: 29-05-2020