Western Cape Government

BETTER TOGETHER.

Property Efficiency Report 2017/18

An annual publication that demonstrates the Western Cape Government's commitment to managing and improving the efficiency, effectiveness and sustainability of its property holdings

Issue No. 7

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ABOUT THE REPORT

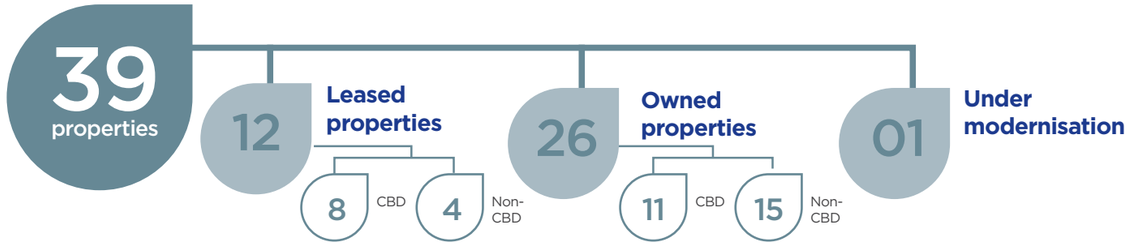
Data and transparency continue to be hallmarks of how the Western Cape Government (WCG) operates, and the evidence can be seen in this, the 7th edition of the Property Efficiency Report. The information presented here is based on data consolidated by various components of the Department of Transport and Public Works. For the first time, we have been able to include information obtained from remote meters installed in various facilities in the WCG property portfolio. Data about off-grid solar photovoltaic (PV) electricity generation, supplementary water supplies from basement water sources for purposes such as flushing toilets, and the new heating, ventilation and air conditioning plants (HVACs) at 9 Dorp Street and 27 Wale Street have also been included for the first time. While this can only be reported on for two buildings (so far), it highlights the benefits of improving stewardship of natural resources and reducing dependence on the municipal supplied resources.. The performance matrix that has been developed over the last several years comprises a range of data elements that together provide a context-appropriate picture per individual facility of resource utilisation efficiency, office suitability, and space utilisation efficiency.

Ongoing Office Modernisation projects continue to improve office space utilisation and reduce costs by increasing the number of desks and workstations per unit area. As mentioned, consumption of natural resources in the portfolio is an area of interest, focusing on electricity and water. In addition, data from remote meters has made it possible to generate automated performance reports, generate service alerts for urgent attention, pinpoint faults, and highlight areas where efficiency gains can be made.

Reporting period and scope

This report examines the performance of 39 selected office buildings from the WCG's real estate portfolio for the financial year 2017/18. All WCG-owned and leased-in office accommodation in the Western Cape of over 1 000m² has been included in the report.

The data is calculated for the **12 month period** from April 2017 to March 2018



The following changes have been made in the way we report on certain buildings:

Changed

1 Dorp Street, 3 Dorp Street and 4 Leeuwen Street were previously reported on as a complex, and are now divided into three: 1 Dorp, 3 Dorp, and 4 Leeuwen.

3 Dorp Street has not been used for calculation purposes as the entire building is currently under modernisation.

4 Dorp Street, 7 Wale Street and 15 Wale Street were previously reported on as a single component, as a single complex, and are now divided into two: 4 Dorp Street, and 7 & 15 Wale Street.

Government Garage, previously reported on as a single complex, is now divided into two: Government Garage (Roeland Street) and Government Garage (Hope Street).

Excluded

The Beaufort West (Social Services) and Paarl (Social Services) properties have been vacated, and the occupiers relocated to office space of less than 1 000m². These properties now fall outside the reporting portfolio.

The Western Cape Education Department (WCED) Central Office has been excluded from this report due to the unavailability of 12 months of reliable data.

The Green Building (6 615m²) and Khayelitsha Shared Services Centre (2 687m²) have now been added to the portfolio

Data management and access

The collection of accurate and relevant data from appropriate sources is essential in performance reporting. The principal sources of baseline data for this report are the DTPW Public Works Immovable Asset Register, the Property Support Office, Operational Property Management, General Infrastructure, the provincial Department of Social Development, the Department of Community Safety, and the various remote meters which have been installed and came online during this reporting period.

This information must then be collated with a sound methodology, and trusted insight needs to be applied to ensure the data is correctly interpreted. In this transition period, care has been taken to correct incorrect installations of remote meters, ensuring that these are registered to the correct buildings, and that municipal accounts not matching remote metering are investigating and altered.

The real estate portfolio has been benchmarked against a comprehensive Green Building Council of South Africa (GBCSA) database of office building data in the same geographical areas. This energy and water benchmarking tool assists building owners to understand how their building is performing in comparison to similar buildings in other sectors and other buildings in the owner's real estate portfolio.

CASE STUDY

RESOURCE CHAMPION

GERHARD KIRCHNER -
Resource Champion

The position of Resource Champion was created within the Department in June 2017 due to the increasing need for the oversight and management of resourceslike electricity, water and waste consumption within the WCG office portfolio. The primary focus of the Resource Champion was to ensure the principles of **Measuring**, **Monitoring** and **Management** were instilled within the Department in the context of resource utilisation.

The Resource Champion's key responsibilities:

- **Engage management to promote resource savings initiatives within WCG offices**
- **Provide mentorship and training for resource champions and facility managers**
- **Prepare resource management policies and savings strategies**
- **Provide input on capital and maintenance resource savings projects**
- **Report on resource utilisation, expenditure and savings**
- **Monitor and manage resource consumption**

The primary focus of the Resource Champion for the reporting period was overseeing the installation and activation of the remote meters across the relevant portfolio. Furthermore, with more than 600 meters installed during the period, the Resource Champion was required to ensure that standard operating procedures where put in place in order for an automated alert and notification system to be developed and activated together with service level agreements and infrastructure requirements between the departments Immovable Asset Management and General Infrastructures Chief Directorates. All of these have been successfully rolled out.

The availability of consumption data via the remote meters has already resulted in immediately identifying significant opportunities for saving water, a critical focus area for the WCG during the recent drought period experienced in the Western Cape.

Furthermore, the Resource Champion undertook to ensure the development of **Monthly Building Performance Reports** for the portfolio as well as **Facility Performance Reports** for each individual building. These reports are automatically generated and distributed monthly to the relevant role-players which include Accounting Officers and facilities managers. These reports also enable readers to compare our portfolio performance against that of the private sector, as well as promote a competitive efficiency culture among the various WCG departments occupying the buildings.

In terms of water performance, the Resource Champion's interventions, enabled by the availability of and access to the remote metering system, were able to drive employee behavioural change within a number of the key office buildings. Through communicating weekly water consumption reports to relevant staff, together with the cumulative water savings from the outset of the intervention, significant savings were achieved. The graphs highlighting these savings are included as part of the Water Business Continuity Plan case study on pages 20 and 21.

The impact of having created and filled the position of Resource Champion is yet to be realised, due to a number of additional performance measures being considered for rollout, as well as interventions not reported on fully due to overlapping with the next reporting period. As the role is further institutionalised, we expect the results for the upcoming reporting period to continue to build on the positive results reported on in this 7th edition of the Property Efficiency Report (PER).

Foreword

DONALD GRANT
Minister of Transport and Public Works

When the first edition of the Property Efficiency Report (PER) appeared, it was lauded as the first of its kind in Government at any level in South Africa. It was truly a ground-breaking publication and has grown in stature to this, the 7th edition. More importantly, it has, with each passing year reported upon, improved its scope and depth and reflects the Western Cape Government's (WCG's) continued commitment to achieving efficient, optimal and cost-effective utilisation of its property portfolio.

Not only does this 7th report demonstrate clearly the ongoing improvement in the utilisation, sustainability and environmental awareness of property management, it also makes use of clearer and more accurate indicators in determining the outcomes.

> The results demonstrated by the report covering what was undertaken and achieved during the 2017/2018 financial year are a clear reflection of the investments made and the steps taken by the DTPW over the course of the reporting period.

South Africa continues to experience challenging and, some would say, tumultuous economic times. The DTPW consistently strives to achieve a healthy, sustainable balance of its many competing objectives, including reducing dependency on non-renewable resources. The best way in which to achieve any meaningful success is through the implementation of sound asset management principles and strategic decision-making tools across the immovable asset management and operations space.

Improvements in data availability and asset information sharing have allowed the Department to establish a sound foundation for the promotion of a culture of asset management. This has provided a taste of the large gains that can be achieved through the ultimate implementation of the full asset management system.

The 7th edition of the report has confirmed that the WCG has established itself as the benchmark setter when it comes to electricity and water utilisation. The WCG is fast setting the trend when it comes to optimising space utilisation while improving the working environment of the employees through initiatives such as the Office Modernisation Programme.

Each edition of the PER highlights improvements to the range and depth of the performance measures used by the Department, demonstrating our ability to learn and to improve on how we carry out our custodial responsibilities drawing from a combination of tested policies and new innovative approaches. Our response to the recent Western Cape water scarcity crisis is a case in point.

> We continue to build on the availability of bigger, better data to provide a firmer base for helping us to drive cost savings and efficiency gains across the portfolio. An example is the remote meter project.

I am very aware that these improvements do not just happen in what is a tough built-environment space. Our excellent staff have worked long and hard at bringing these improvements about – both in the development of new ideas and techniques and in the application of these to our property portfolio. The excellence of this publication stands as a tribute to their hard work and to their commitment to improving the working environment of all WCG employees and the experience of all visitors to our facilities.

Thank you to all concerned.

Introduction

JACQUELINE GOOCH
Head of Department, Transport and Public Works

This is a case of déjà vu. For the last four years we have been reporting that the South African economy continues to face a challenging fiscal outlook, economic growth continues to be under 2%, consumer debt has increased, and resources remain scarce, especially water. In the Western Cape, the extended drought has forced Capetonians, both individuals and businesses, to adopt extreme water-saving measures.

> In the year under review, the DTPW continued to introduce innovations to improve efficiency and optimise resource utilisation throughout the provincial government portfolio.

The evidence presented in this 7th edition of the PER is testament to the excellent work achieved by our internal team and the occupiers of each building. The remote metering system has now enabled us to pinpoint areas of concern, detect leaks early or spikes in usage, and alert us to meter readings and billing discrepancies for prompt rectification. Furthermore, we are now able to divide a number of the big property complexes, such as 1 and 3 Dorp Street and 4 Leeuwen Street into individual building units, providing a better, more disaggregated, assessment of the portfolio's performance.

This PER continues to set the standard for ongoing improvement of immovable asset management in the public sector. The purpose is clear – to enhance service delivery to all the people of the Western Cape, and to be recognised as the most efficient State office portfolio user in the country.

Location of portfolio buildings

Executive Summary

7th EDITION

The report examines the performance of **39 key office buildings** in the WCG's real estate portfolio

The total reporting portfolio size is **215 245m²**

Electricity

145,28 kHw/m² Total consumption was reduced by **8,15%**

236,54 kHw/m² Out-performs the industry benchmark by more than **38%**

PV Generation

It is with great excitement that we include Rooftop Photovoltaic Solar (PV) generation in the report for the first time.

12,7% Total generation at **9 Dorp Street**

5,5% Total generation at **27 Wale Street**

Water

Consumption in the portfolio was reduced during the reported period

24% Consumption was reduced to **0,69 kL/m²/pa**

0,86 kL/m²/pa Out-performs the **industry benchmark**

Office Modernisation Programme

18,78m² per desk - down from 21,44m²

15m² Industry benchmark

Below industry average

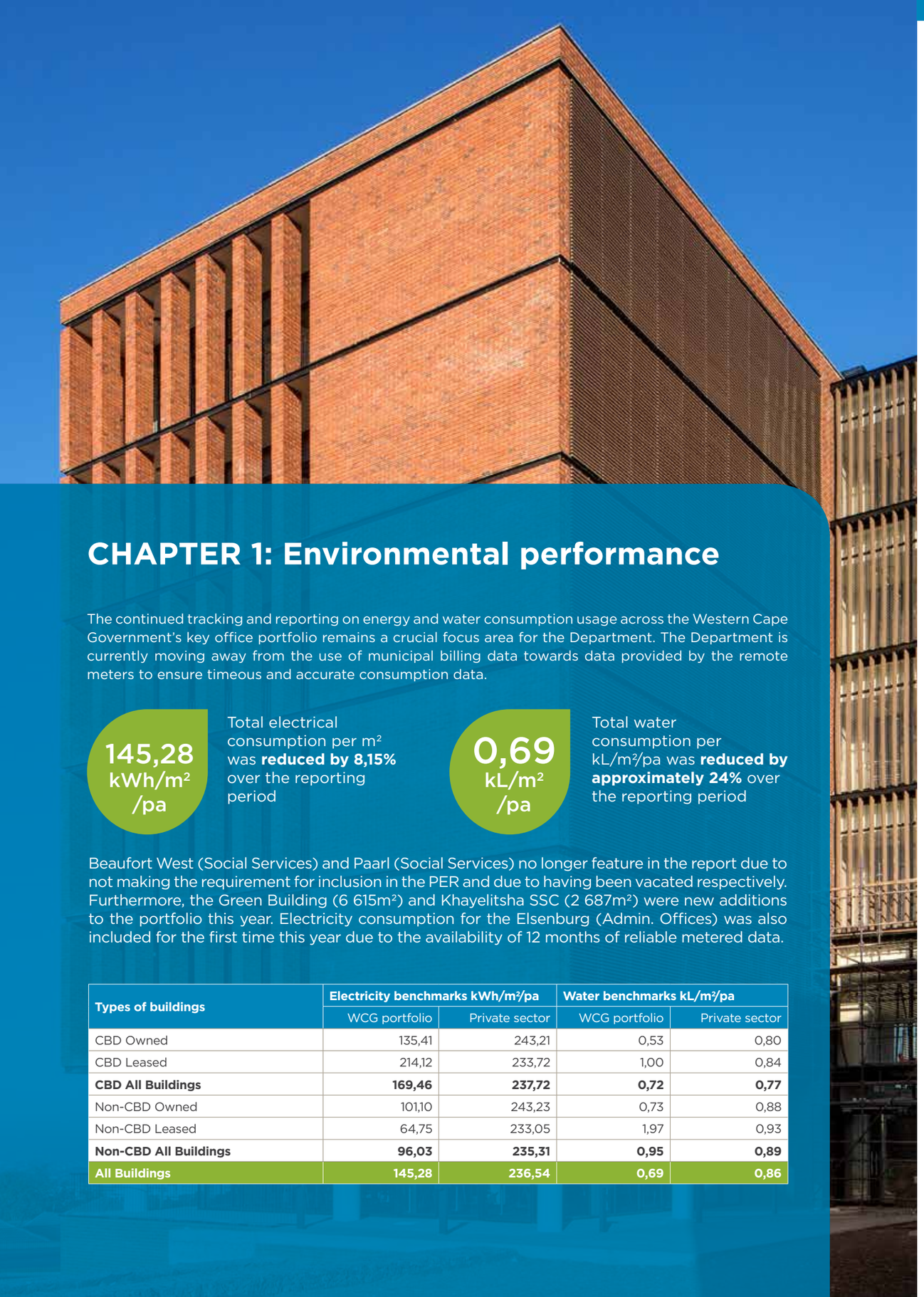
3 CBD Properties

9 Non-CBD Offices

At R3 807 per m², the total cost increased by more than 40%

Significant upfront capital investment will bring future savings

	2016/2017				2017/2018			
	All WCG offices	CBD offices	Non-CBD offices	Private Sector	All WCG offices	CBD offices	Non-CBD offices	Private Sector
WC portfolio net area	212 466	149 740	62 726	-	215 245	145 388	68 290	-
Accommodated office staff	10 034	7 804	2 230	-	9 949	6 900	3 049	-
Cost/m²	2 691	3 052	2 609	-	3 807	4 336	2 636	-
m²/FTE	26,6	20,9	31,3	-	23,08	20,02	26,13	-
m²/Desk	21,44	19,19	29,80	-	18,78	17,98	20,8	
Energy kWh/m²/pa	158	183,43	84,79	246	145,28	169,46	96,03	236,54
Water kL/m²/pa	0,91	0,99	1,08	0,89	0,69	0,72	0,95	0,86



CHAPTER 1: Environmental performance

The continued tracking and reporting on energy and water consumption usage across the Western Cape Government's key office portfolio remains a crucial focus area for the Department. The Department is currently moving away from the use of municipal billing data towards data provided by the remote meters to ensure timeous and accurate consumption data.

145,28 kWh/m² /pa

Total electrical consumption per m² was **reduced by 8,15%** over the reporting period

0,69 kL/m² /pa

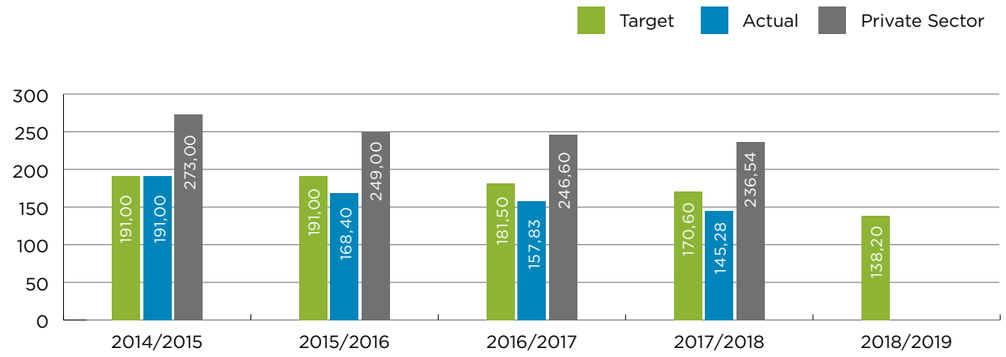
Total water consumption per kL/m²/pa was **reduced by approximately 24%** over the reporting period

Beaufort West (Social Services) and Paarl (Social Services) no longer feature in the report due to not making the requirement for inclusion in the PER and due to having been vacated respectively. Furthermore, the Green Building (6 615m²) and Khayelitsha SSC (2 687m²) were new additions to the portfolio this year. Electricity consumption for the Elsenburg (Admin. Offices) was also included for the first time this year due to the availability of 12 months of reliable metered data.

Types of buildings	Electricity benchmarks kWh/m²/pa		Water benchmarks kL/m²/pa	
	WCG portfolio	Private sector	WCG portfolio	Private sector
CBD Owned	135,41	243,21	0,53	0,80
CBD Leased	214,12	233,72	1,00	0,84
CBD All Buildings	**169,46**	**237,72**	**0,72**	**0,77**
Non-CBD Owned	101,10	243,23	0,73	0,88
Non-CBD Leased	64,75	233,05	1,97	0,93
Non-CBD All Buildings	**96,03**	**235,31**	**0,95**	**0,89**
All Buildings	**145,28**	**236,54**	**0,69**	**0,86**

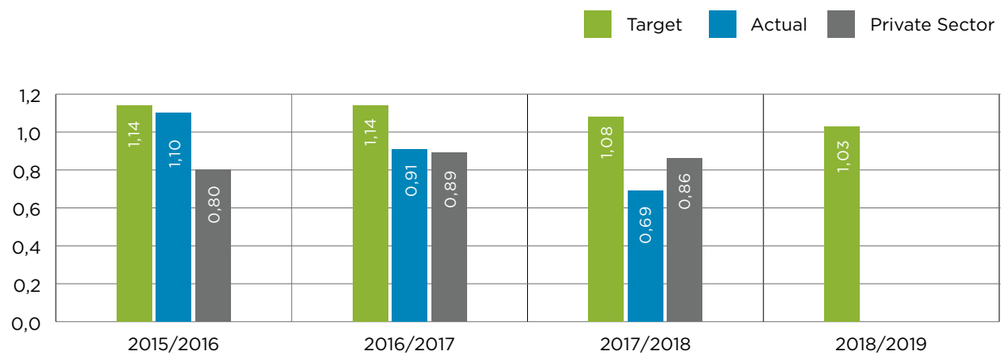
Environmental Performance Summary

Electricity performance per kWh/m²/pa



The reported reduction in electricity consumption means that the Department is well-positioned in its goal to significantly reduce electricity consumption by 30% from the 2014/15 amount by the end of the 2019/2020 financial year.

Water performance per kL/m²/pa



Total water consumption per kL/m²/pa was reduced by approximately 24% (0,69kL/m²/pa) over the reporting period. Hefty water restrictions imposed by the local authorities due to the drought, various water-saving installations throughout the portfolio, as well as improved consumer behaviour contributed to the reduction (See the water BCP case study on pages 21 and 22). The analysis excludes 3 Dorp Street (under modernisation), 35 Wale Street, Elsenburg Admin Office, WCED Central Office, the Green Building and Khayelitsha SSC due to the non-availability of consumption data for various reasons.

CASE STUDY

REMOTE METERING

The Department's remote metering project commenced in 2014 as a single-building, 60-meter pilot project, which after its success became Phase 1 of a multi-phase project. During the 6th PER, we reported on Phase 2 of the project which covered a further 51 electricity and 7 water meters that were installed, covering 12 WCG-owned buildings in the Cape Town CBD.

During the course of 2017/18 (Phase 3 of the project), a total of 631 electricity and 94 water meters had been installed, bringing the number of PER buildings with remote metering to 32. The consumption data was also made available online across the portfolio.

The property asset management team members overseeing the performance of PER buildings benefit from a number of system features:

- **Auto-alert notifications when abnormal water flow is detected**
- **Bill comparison reports of consumption recorded in municipal bills and remote-metered consumption**
- **Tariff analysis reports to determine whether buildings are being billed according to the correct tariff**
- **Automated EPCs (energy performance certificates) for each monitored building**
- **Automated monthly portfolio and individual facility consumption reports for the attention of accounting officers and facility managers. These reports compare:**
  - **individual and group building performance with industry benchmarks**
  - **the performance of the WCG-owned property portfolio with the leased portfolio**
  - **the WCG city centre portfolio with properties outside the city centre**

32 PER buildings

631 electricity meters installed

94 water meters installed

The significant progress of the project so far brings the Department much closer to attaining "smart status" for monitoring and evaluating the environmental performance of the PER building portfolio.

Portfolio electricity consumption

The portfolio continues to out-perform the private sector, this year by more than 38%

145,28 kWh/m²/pa Portfolio performance

236,54 kWh/m²/pa Private Sector benchmark

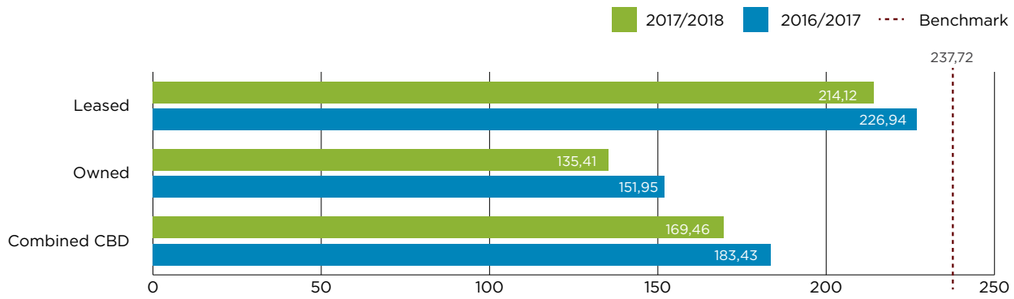
The private sector benchmark is currently 236,54kWh/m², and the portfolio has achieved 145,28kWh/m². This achievement is significant for the Department and a firm indication of its continued commitment to ensure that the WCG's key office portfolio operates as efficiently and sustainably as possible through continuously driving down consumption using various sustainability initiatives.

Private landlords are not currently investing significantly in capital and maintenance, due to the current volatile economic climate, in order to retain tenants by keeping rentals stable. In addition to that, the drought in the Western Cape has forced landlords to move their focus to water-saving initiatives. As a result, the focus has moved away from implementing and monitoring electricity usage to water efficiencies instead. Most energy efficiency projects are only implemented as part of planned maintenance programmes over a period of years, or as new tenants take up space.

The private sector improved its performance by more than 13% over the last four years, and by 4% over the reporting period. The WCG's PER portfolio has improved its performance by more than 24% over the last four years, and over 8% in the reporting period alone.

In this edition, we will analyse the performance of CBD vs non-CBD buildings in closer detail.

CBD properties - electricity consumed per m²



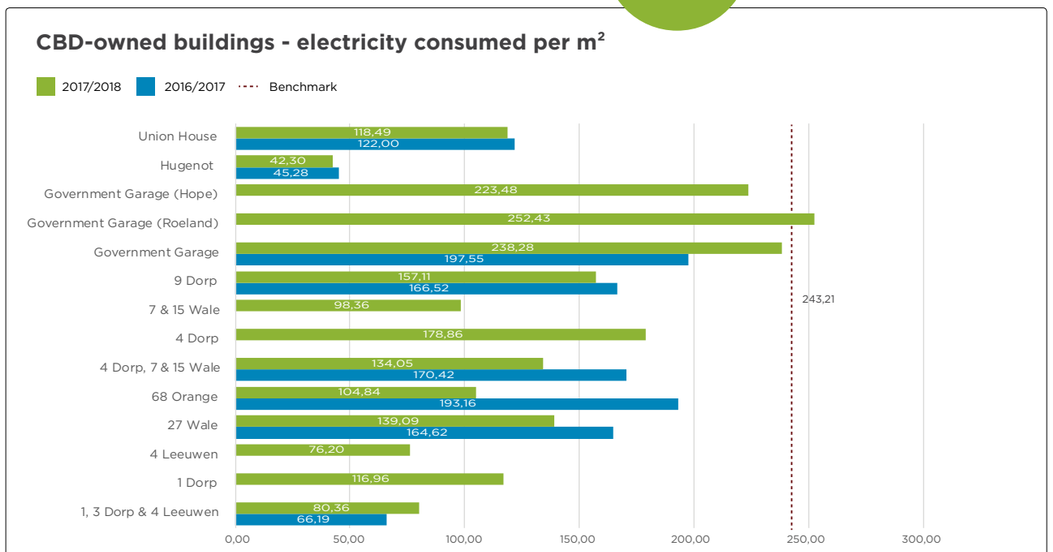
CBD electricity consumption

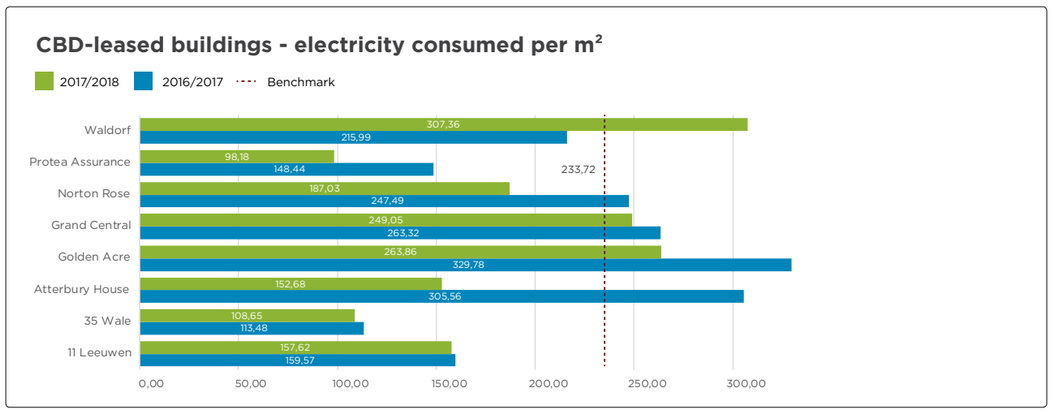
CBD properties continue to perform well with an improvement in efficiency over the last two years.

Electricity consumption in owned buildings has decreased by more than 10% during the reporting period. CBD leased buildings showed a reduction of approximately 5,65% for the same period.

28% The CBD portfolio outperforms the industry benchmark by 28%, which is commendable

237,72 kWh/m²/pa CBD private sector benchmark





The majority of owned buildings in the CBD portfolio showed an improvement in efficiency, with 1 & 3 Dorp Street and 4 Leeuwen Street (complex) and Government Garage (Roeland and Hope Streets) being the exceptions. All owned CBD buildings have outperformed the private sector benchmark, Government Garage being the only exception. The owned CBD portfolio is arguably the most energy efficient office portfolio of its size in South Africa. In the CBD our leased buildings are, on average, less efficient than the owned buildings. Waldorf is the only leased CBD property that had an increase in consumption over the reporting period. Golden Acre, Grand Central and Waldorf all performed worse than the private sector benchmark of 233,05kWh/m²/pa. Interestingly it has been noted that where leased buildings have separate meters per lessee, energy performance has been seen to be below the benchmark average, supporting the benefits of remote metering.

CASE STUDY

ROOFTOP SOLAR PHOTOVOLTAIC SYSTEMS

Buildings consume 40% of the world's energy and contribute to 33% of the world's greenhouse gas emissions. The greatest opportunities to meaningfully reduce the WCG's environmental footprint lie in retrofitting existing buildings with solar photovoltaic (PV) systems, and metering water and electricity use to maximise efficiency and reduce costs.

While the upfront costs of investing in solar PV systems are relatively high, these systems pay for themselves through electricity savings over a relatively short period of time. Such systems also help to mitigate the negative impact of our activities on the physical environment.

In its capacity as custodian and manager of the provincial government's immovable asset portfolio, the DTPW actively promotes the use of renewable energy in public buildings. In order to prove our commitment and to lead the way, the Department has set aside approximately R44,4 million for the installation of rooftop solar PV systems at 14 government-owned properties. These grid-tied systems will reduce our reliance on the national grid, as well as the cost associated with purchasing grid electricity.

Further benefits include the provision of skills training in renewable energy technologies, and targetted procurement from small- and medium-sized enterprises.

This initiative gives expression to the Energy Security Game-Changer of the WCG, the City of Cape Town, and the five largest non-metro municipalities, to support the province's economic growth through energy security. South Africa is generally sunny, and we have access to one of the strongest solar radiation resources in the world. This means that solar PV systems have the potential to provide a major contribution to the country's energy needs. By taking the lead in environmental sustainability practises, the provincial government also aims to encourage the private sector – the built environment and construction industries – to adopt a greener approach to design and construction.

Key benefits of rooftop solar PV systems:

- **Offset peak demand electricity costs and flattening the electricity load profile**
- **Reduce dependence on expensive grid electricity**
- **Reduce carbon emissions**
- **Hedge against future electricity price rises**
- **Promote the use of renewable energy**

Accumulative monthly avoided cost/savings **R968 222**

10 Projected average payback period (years)

3 163 Projected annual energy produced (MWh/year)

R2 821 029 Projected annual energy saving (during first year)

CASE STUDY

9 DORP STREET

One of the Department's flagship properties in the PER portfolio is 9 Dorp Street. As part of the WCG's efficiency drive, several interventions have been implemented at the building with the idea of rolling them out further depending on their success.

Interventions include:

Groundwater utilisation

The separation of sanitation water and fresh water supply was completed in May 2017. This enabled the Department to utilise the available groundwater to feed all the water closets in the building. The remote meters that measure groundwater supply to the greywater tanks were also activated at the end of October 2017.

36% Municipal demand decreased over the reported period

This is a noteable reduction in reliance on the municipal supply.

Electricity consumption

Various projects were undertaken to improve efficiencies in the building. Energy efficient basement lighting with motion detection, hydro-boil energy saving, stairwell and workshop lighting, as well as the installation of gas sensors, were all traditional efficiency efforts. As part of the water-saving initiative in the drought, air-cooled chillers were installed towards the end of the reporting period. These traditionally use more electricity than conventional chillers, however, the average electricity consumption remained relatively stable.

Water demand management systems

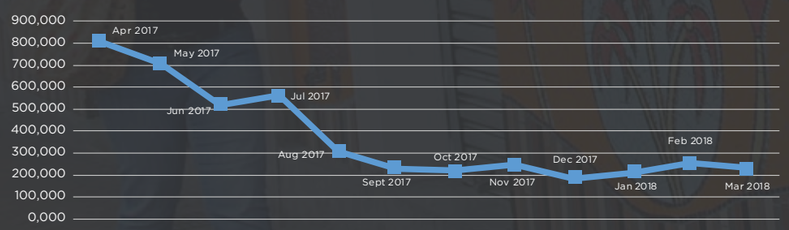
Several interventions were undertaken. These included urinal retrofit (41 waterless urinal cartridges installed into existing urinals), metered taps retrofit, and the first air-cooled chiller commissioned at the end of January 2018. A second air-cooled chiller was installed mid-March 2018.

Renewable Energy

12,7% of total consumption

The 51,66 kWh installation generated 81 240 kWh power during the period 1 April 2017 to 31 March 2018.

Water Consumption (Kl)



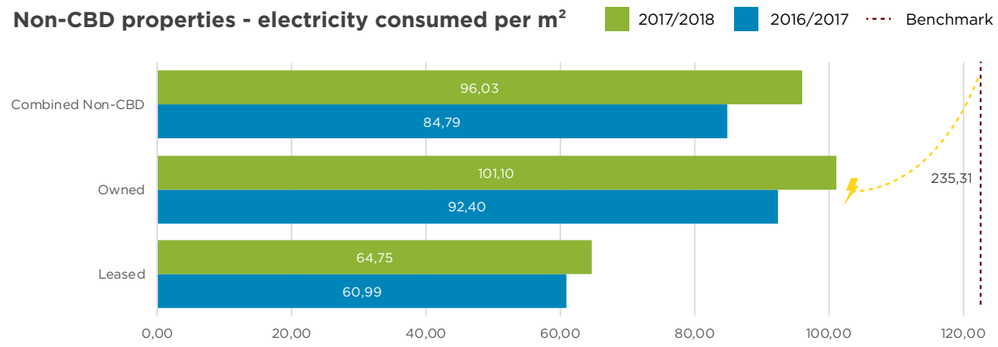
This building continues to be one of our best performing properties, particularly when looking at municipal water consumption. The interventions installed will continue to be monitored for performance and rolled out to other buildings.

Non-CBD electricity consumption

Non-CBD buildings on average are outperforming the private sector benchmark of 235,31 kWh/m²/pa

However, the owned buildings are performing less efficiently (101,1 kWh/m²/pa) than the leased buildings (64,75 kWh/m²/pa). In terms of year-on-year performance, the electricity consumption of leased premises has increased by 6,17% and by 9,41% in the owned properties. The causes for this are under investigation.

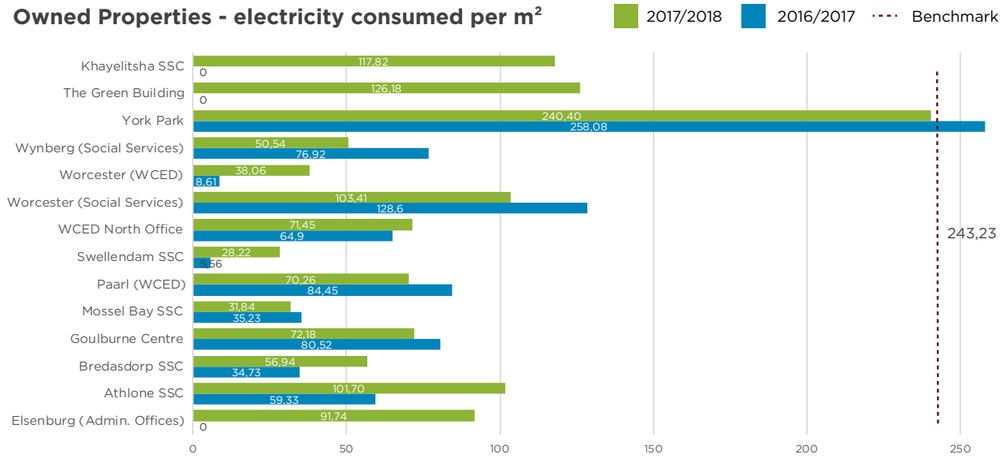
Non-CBD properties - electricity consumed per m²



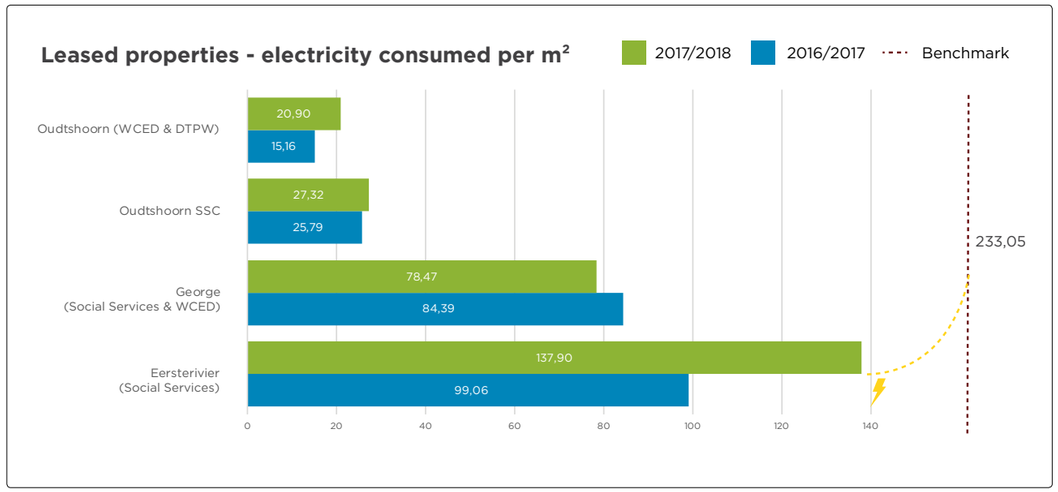
The biggest increases in the owned building portfolio were in Swellendam SSC, Worcester (WCED), Athlone SSC and Bredasdorp SSC.

The two new additions to the portfolio, the Green Building and Khayelitsha SSC, have both performed exceptionally at 128,18 and 117,28 kWh/m²/pa respectively.

Owned Properties - electricity consumed per m²



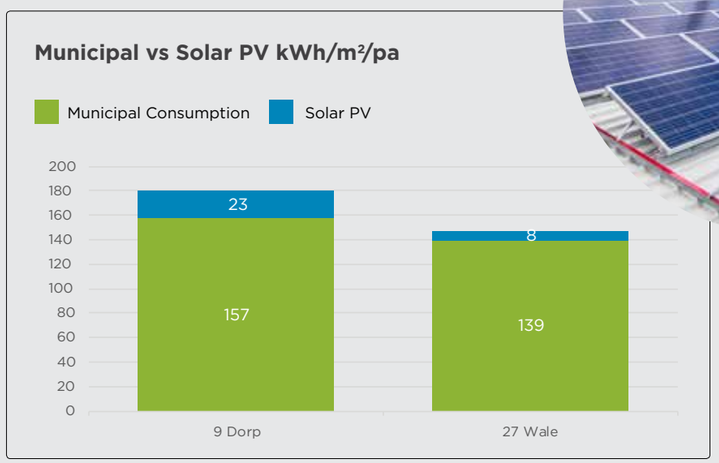
Chapter 1: Environmental performance



In the leased buildings portfolio, George (Social Services & WCED) was the star performer. It was the only building to improve on its energy efficiency. In general, non-CBD buildings continue to perform well, and as more remote meters are installed and come online, the accuracy and reliability of the data will also improve.

Energy consumption: Solar PV and municipal electricity consumption

It is with great excitement that we include Solar PV consumption in this report for the first time



The first two buildings to be reported on are 9 Dorp Street and 27 Wale Street. **PV consumption accounts for 12,7% and 5,5% of total consumption at 9 Dorp Street and 27 Wale Street**, **respectively**. The rollout of PV, as explained in more detal in the PV case study on page 13, showcases the WCG's commitment to occupying and operating an efficient and sustainable office portfolio that sets the benchmark for public and privately-owned office portfolios alike.

The Green Building

Portfolio water consumption

Water consumption in the portfolio has decreased by 24% over the reporting period

0,69 kL/m²/pa Portfolio performance

0,86 kL/m²/pa Private sector benchmark

Arguably, the biggest challenge facing the Western Cape during the reporting period was the continued drought.

Water restrictions were increased and landlords were obliged to spend significantly more on water efficiency projects, as well as infrastructure that could enable them to be less dependent on the municipal supply.

Due to the high tariffs for increased consumption, the utilisation of remote meters has once again proven to be very beneficial. Accuracy of the water consumption data across the portfolio has continually improved with the installation of the meters. Challenges do however exist, but the lessons learnt by our Resource Champion and conveyed to the Department over the last 12 months have been very valuable, paving the way for ongoing success moving forward.

The decrease of water consumption over the last four years underlines the Department's dedication to promoting the efficient use of this very scarce natural resource. This performance is below the private sector benchmark of 0,86kL/m²/pa for the same period.

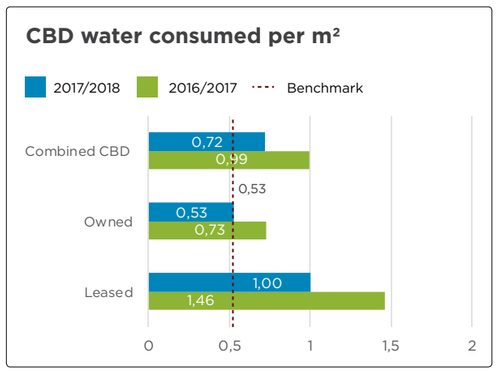
Water consumption data will continue to improve in terms of accuracy and reliability as the remote water meters rollout advances during the following reporting period.

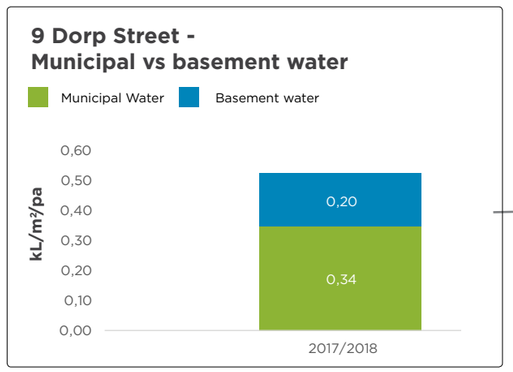
CBD water consumption

The CBD-owned buildings' consumption declined over the reporting period by more than 27%

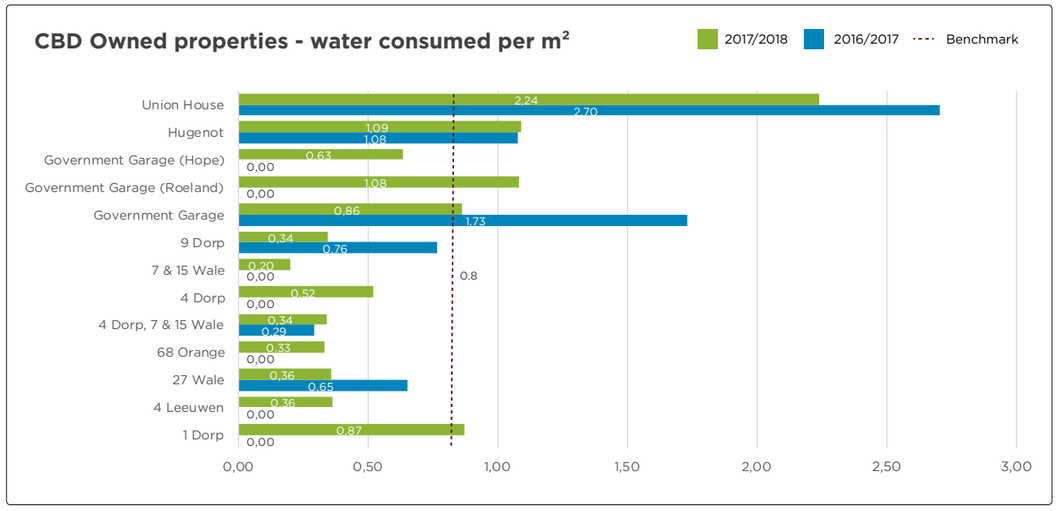
CBD portfolio performance 0,53 kL/m²/pa

The majority of the owned buildings have shown a reduction in water consumption with 4 Dorp Street being the only exception, although it is still below the private sector benchmark. Innovation at 9 Dorp Street has resulted in a significant reduction in water consumption over the prior period, this achievement is attributable to many interventions by the Department and other users in the CBD.





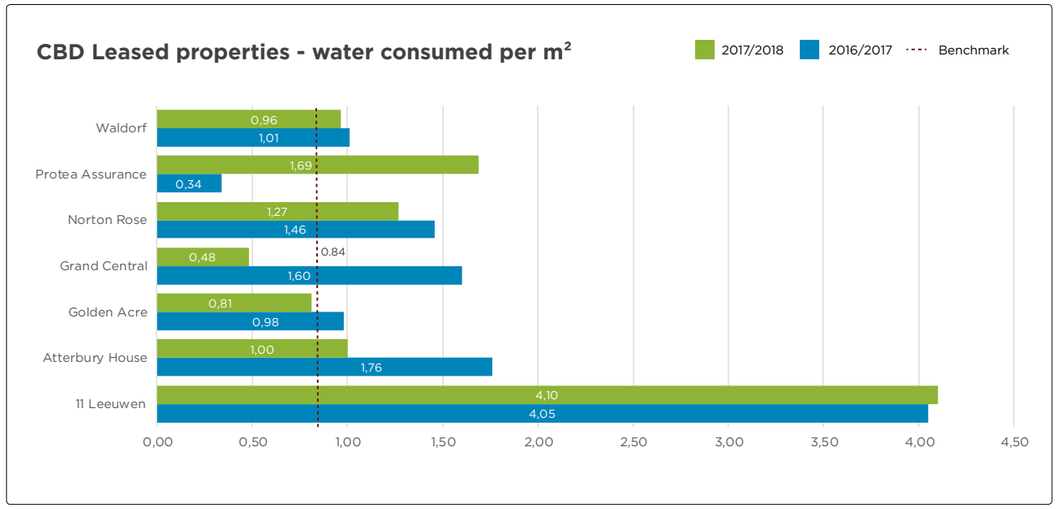
Significantly, 36% of the water consumed at 9 Dorp Street is basement water as a result of yet another initiative by the WCG



Owned buildings continue to outperform leased buildings. The owned buildings consumed less water at 0,53kL/m²/pa than the industry benchmark of 0,8kL/m²/pa over the reporting period. This is a great performance.

The water consumption in two of the leased premises (11 Leeuwen and Protea Assurance) has increased over the period, due to the present structure of the leases. The landlords still have the right to allocate water consumption on a pro-rata rate, and neither of these buildings have remote meters. The Department has no control over the consumption in the leased premises. The Department is busy addressing these issues directly with the landlords.

30% Only CBD-leased buildings have demonstrated an increase in efficiency of more than 30%



CASE STUDY
WATER BUSINESS CONTINUITY PLAN

Early in 2017, the Western Cape Province was confronted by a serious ecological and systemic shock - an extended drought period with the associated risk of acute water shortages. In terms of the Disaster Management Act, 2002 (Act 57 of 2002) (DMA), the Premier declared a Provincial State of Disaster on 23 May 2017. At the WCG Cabinet meeting on 16 August 2017, the Cabinet resolved to support the establishment of a WCG Water and Drought Steering (Coordinating) Committee, under the auspices of the Director-General, as well as various dedicated project teams and work streams in a structured drought and water crisis response institutional framework. As a result, the DTPW was tasked with the overall coordination of the business continuity plans (BCP) of all WCG departments and entities in the event of disruptions in their respective service delivery requirements as a result of the shortage or potential unavailability of water in any municipal areas of the Province.

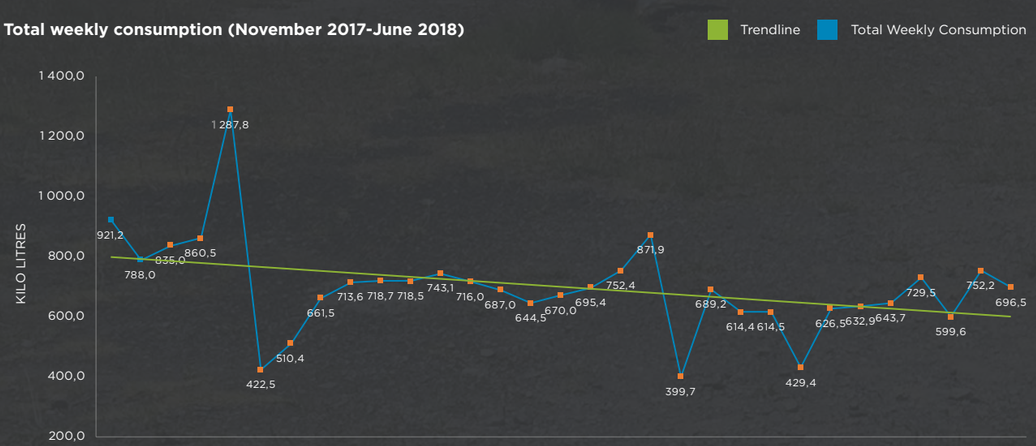
A task group of representatives from each of the 13 WCG departments and 4 provincial entities, together with the custodian and implementing agent representatives of the Public Works Branch of the DTPW, was established. This task group's objective was planning which essential service delivery requirements of the WCG could continue to be met when there was constrained or no municipal water in a geographic area, including the WCG's efforts to contribute to avoiding a 'dry taps' situation arising.

The Water BCP had two focus areas:

1. **Demand management interventions** to reduce water consumption at all WCG facilities
2. **Supply side interventions** to not only reduce municipal water consumption, but also to ensure that there were essential supplies of drinking water for sanitation as well as for fire safety purposes in key facilities

Through behavioural change interventions and key WCG water demand reduction interventions, weekly water consumption in CBD offices of the WCG up to 29 June 2018 dropped by 27% when compared to 17 November 2017.

Total weekly consumption (November 2017-June 2018)



45% The consumption reduction target set by the City of Cape Town of 45% versus the previous years' consumption (i.e. October 2016) was also exceeded

6 037 Kl The cumulative water savings against the City of Cape Town's target for this period was 6 037 Kl (2,4 Olympic Pools)

Several significant facilities were identified to be made water secure. These included key provincial hospital sites, and primary health care facilities (CDCs and CHCs) most at risk, as well as Social Development Child and Youth Care Centre (CYCC) residential facilities and selected WCG command and control office facilities. To water secure these identified critical sites, Public Works procured, on an emergency basis, a framework of contractors for geohydrology, drilling, yield testing, quality testing, equipping, treatment, storage and reticulation. Approval and licensing specialists, safety and security agents and water system operation and maintenance service providers were also secured for the identified sites. Packages of contractors were parcelled together to focus on various facilities. From the inception of the programme on 1 September 2017, initial site establishment and the first drilling which commenced on 6 November 2017, sufficient groundwater was secured at 73 of these facilities (as at 25 September). The first groundwater flowed on 4 April 2018. Once drilling was complete, yields and water quality was confirmed and the designs for the treatment and reticulation to sites were finalised.

The progress of the programme included:

- **164** boreholes drilled
- **36** engineering solutions designed and approved for implementation
- **154** boreholes pump tested to verify yields, sustainable pump rates and to determine recovery rates
- **13** key WCG facilities already capable of being supplied by ground water resources, pending applicable regulatory approvals

Most interventions undertaken by the WCG are permanent and have been designed to improve resilience to future water shocks and stresses. In pursuit of 'resilience', a fundamental premise is that climate change is a reality. Predictions for the south-western Cape are that the effects of climate change will be negative – less annual rainfall against a background of higher average temperatures and greater evaporation of surface water. This must be coupled with escalating water demand attributed to rapid urbanisation and growing populations which indicates a significant future water supply challenge. As a result of the Water BCP Programme, the WCG will now be more water resilient. While disaster planning focussed largely on survival (i.e. the 'Day Zero' scenario), the Water BCP programme became a channel to embed water resilience in the WCG. The supply side interventions will continue to run as the primary water supply for the most critical facilities of the WCG, making them more resilient to future water stresses.

Keeping Schools Open Programme

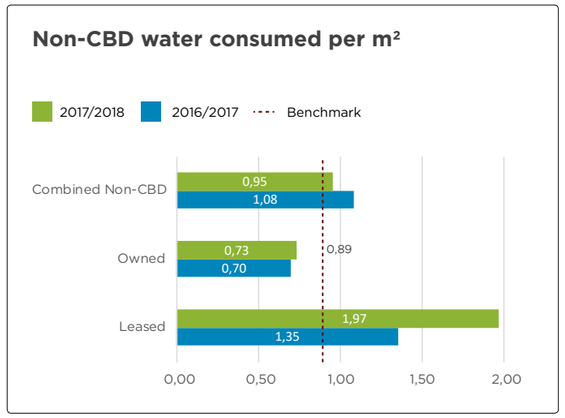
A programme was initiated in late 2017, including both demand and supply side interventions, to keep schools open at phase 2 of the City of Cape Town's disaster plan. Demand side interventions in the Education portfolio included the installation of water restrictor devices for all schools in Bitou, Knysna, Beaufort West and Kannaland (phase 1) and in the highest water use schools in the Metro (phase 2). A programme was also developed and implemented to test, potentially treat and reticulate to site all available groundwater (for at least sewerage purposes) at all schools in the province that already had existing groundwater available. Treated effluent was also harnessed where this was available. Tanks, pumps and plumbing were the minimum level of water security that was provided to schools at risk.

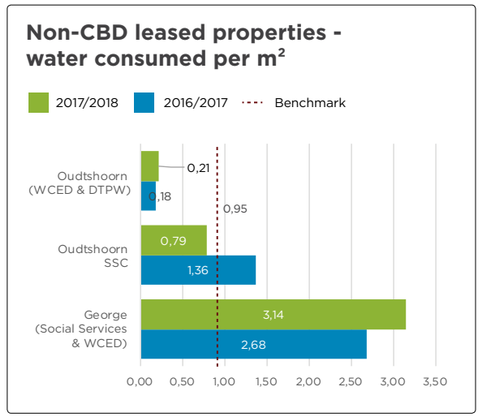
Non-CBD water

The non-CBD buildings are underperforming against the industry benchmark

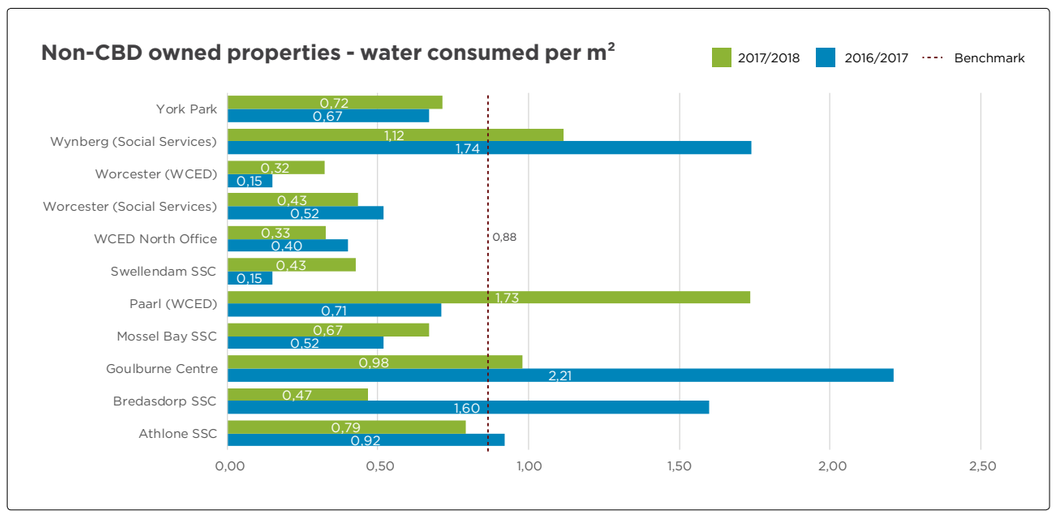
0,95 kL/m²/pa Non-CBD portfolio performance

0,89 kL/m²/pa Non-CBD industry benchmark





With an increase of 144%, Paarl (WCED) was the worst performer – as a result of a major leak – during this reporting period. Goulburne Centre and Wynberg (Social Services) were also above the average. George (Social Services and WCED) is underperforming against the benchmark of 0,89kL/m²/pa.



At the time of publishing this edition of the report, the outliers were still under investigation in order to determine the contributing factors to the high consumption, as well as the reliability of the data provided from source.

3 Dorp Street (under modernisation)

CHAPTER 2: Space utilisation

Overall, space efficiency showed an improvement over the reporting period

The portfolio achieved

18,78m²

per desk, down from 21,44m²

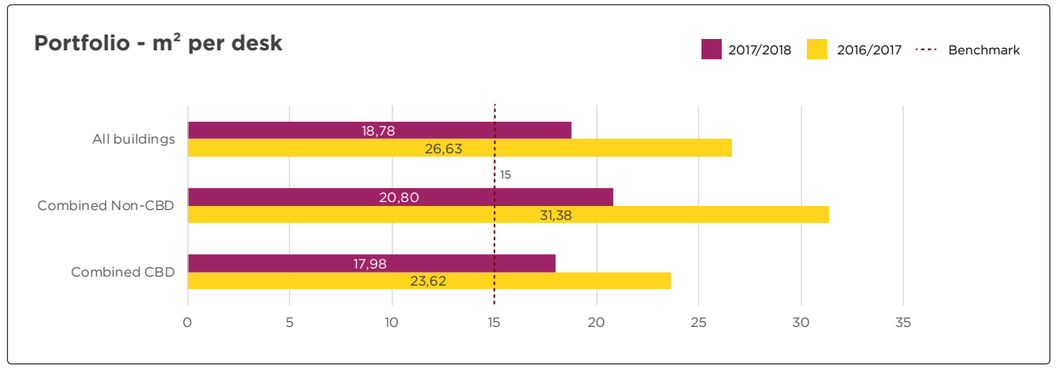
12,4% **Increase in desk efficiency**

The CBD buildings are more efficient than the non-CBD buildings

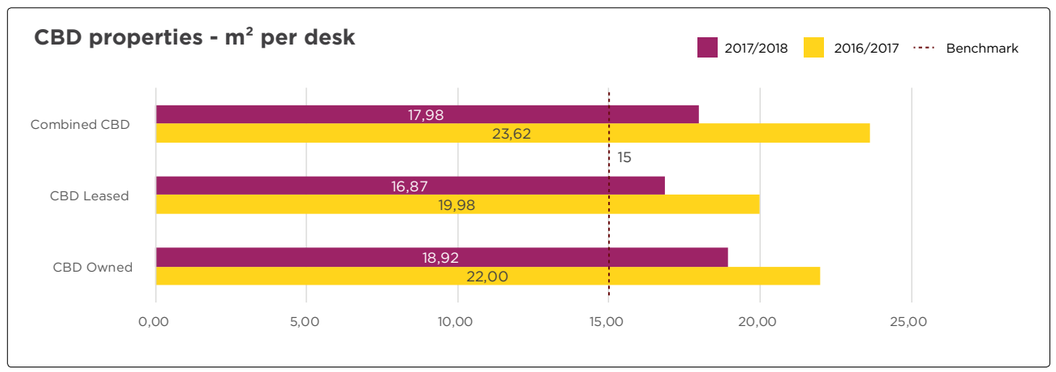
20,80m² per desk Non-CBD properties

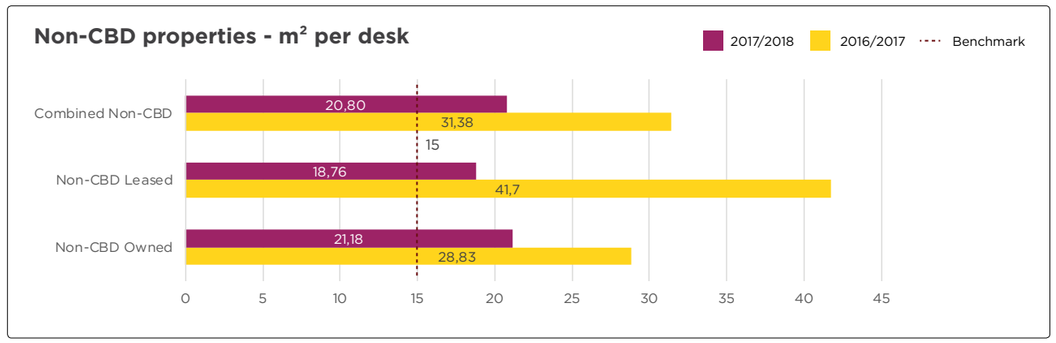
17,98m² per desk CBD properties

15m² per desk Private sector benchmark



There is a marked difference in space efficiency between CBD and non-CBD offices. The non-CBD building portfolio achieved a space per desk of 20,80m², which is an improvement of 33% compared to the previous year, while the CBD properties came in at 17,98m² for the reporting period.





The best efficiency was achieved in the non-CBD leased properties, with a reduction of more than 50% in the space per m² per desk. Non-CBD owned buildings also did well, with a reduction of 23% over the reporting period.

CASE STUDY
THE GREEN BUILDING AT KARL BREMER HOSPITAL

Karl Bremer Hospital was established in 1956, about 20 km east of the Cape Town city centre off the N1 highway. The property is owned by the WCG and most of the site is a provincial health facility with ancillary functions.

In 2012, the WCG launched its 110% Green initiative. The aim was to call on all organisations to commit themselves 110% to the Green Economy in order for the province to become known as Africa's Green Economic Hub. Also in 2012, the provincial Department of Health requested new office space for staff accommodated in prefabricated buildings. This was part of a plan to expand the services offered at the hospital, and to provide space for training and conferences on the southern portion of the site. This led to the design and construction of the Green Building.

The project has been a major success. The Green Building won the Green Building Council of South Africa (GBCSA) 5-Star Green Star rating for the design of a public or educational building. It also won the inaugural GBCSA Socio-Economic Category Pilot Award. The Green Building provides healthier working conditions for employees, uses less water, and generates less waste than other buildings of a similar size.

Addressing water scarcity

Recent drought conditions in the Western Cape and climate change remind us all that it is imperative for built environment facilities to reduce their water consumption.

At the Green Building, 100% of water is either re-used onsite or allowed to infiltrate into the ground where it recharges groundwater reserves. This is made possible through a variety of innovations.

Blackwater treatment plant – The project was designed so that all blackwater (water from toilets and urinals) is processed into greywater and stored for appropriate uses. No blackwater is discharged into the municipal sewer, a very uncommon situation where a municipal connection is available. When the treated greywater tanks are full, excess water overflows to irrigation storage tanks. When these are full, the water overflows to the detention pond. This pond replenishes groundwater by allowing the water to slowly infiltrate into the soil.

Use of treated blackwater in HVAC cooling towers – This innovation involves blackwater being treated onsite and then being reused in the heating, ventilation and air conditioning (HVAC) cooling towers. The treated water is expected to supply more than 75% of total annual HVAC water demand. This represents a saving of approximately 1,1 million litres of potable water per annum.

Harvesting of HVAC bleed-off for re-use – HVAC cooling towers need occasional bleed-offs of water to remove suspended and dissolved solids that stay behind when water evaporates. This bleed-off is harvested and stored in tanks along with harvested rainwater and used for flushing toilets and urinals.

1-in-100-year stormwater infiltrated into the ground – Most built environments feature hard surfaces that cause rainwater to run off into municipal stormwater drains instead of infiltrating into the ground. The Green Building includes four bioretention swales that are capable of retaining the stormwater from 1-in-100-year storm events. The detained water can then slowly infiltrate into the ground, replenishing ground water in the process.

Social responsibility

In developing countries such as South Africa, sustainability in respect of buildings goes beyond environmental sustainability. It also requires taking into account the extent to which the design, construction and operation of buildings responds to socio-economic challenges, e.g. poverty, unemployment, lack of education, lack of skills, and poor health. The GBCSA recognised the notable contribution of the Green Building in this regard by having awarded it the Socio-Economic Category Pilot Award.

Other green features

Other green features of the Green Building include cyclists' facilities, remote metering for electrical and water usage, energy-efficient external envelope design, initiatives to improve indoor environmental quality, and drought resistant landscaping.

A recent addition to the building was a R2 million rooftop solar photovoltaic installation that is expected to generate 122,3 mWh of energy per annum. This provides an electricity saving of R155 000 per annum, which yields a payback period of approximately eight years.

The Green Building key points

R167 187 626
total construction cost

Green Star Rating
for "Design" and "As Built" of an educational or public building

6 615m²
useable area

377
workstations

126 kWh/m²
2017/2018 electricity performance better than benchmark

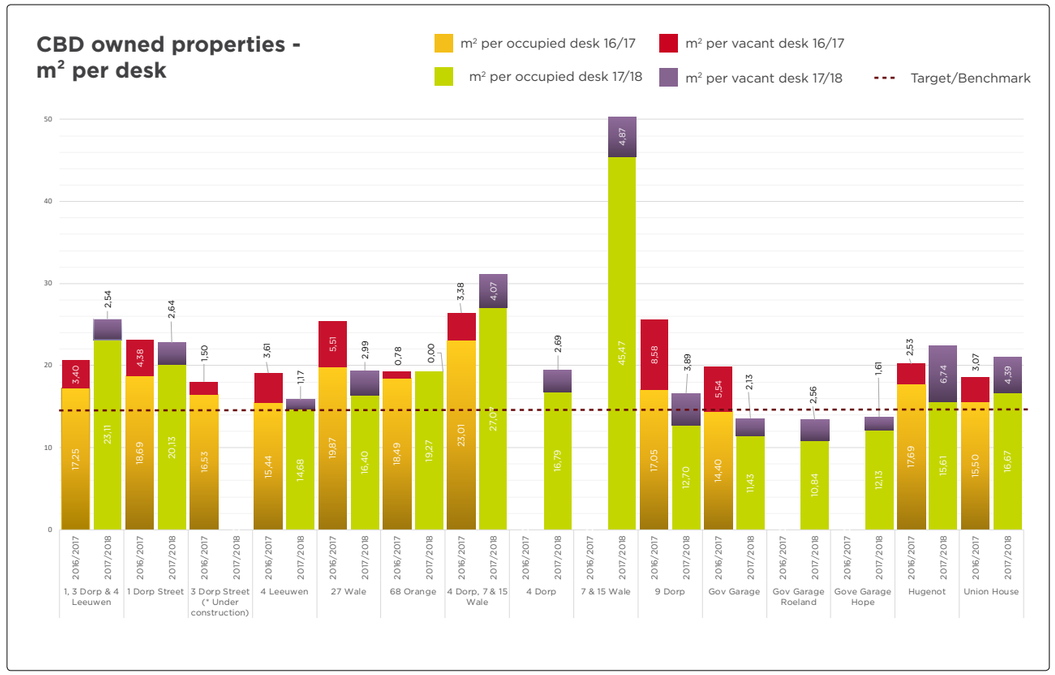
Cape Town CBD offices

CBD owned properties
that improved their space per m² per desk ratio in the reporting period:

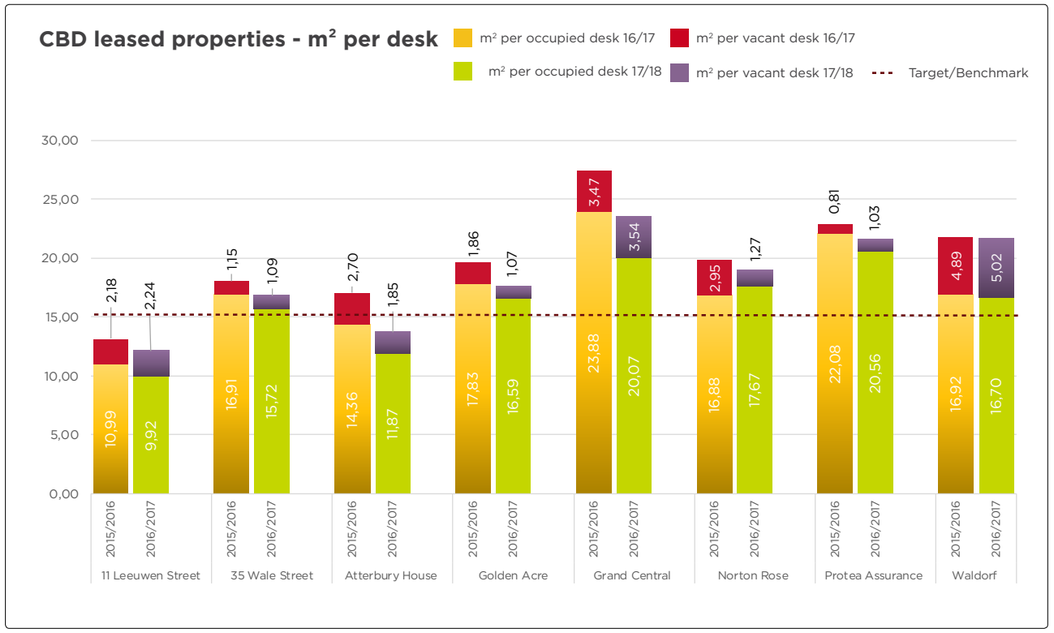
4 Leeuwen - **4,9%**
27 Wale - **17,5%**
9 Dorp - **25%**
Government Garage - **20%**
Huguenot - **11%**

Below industry average
CBD owned properties are all below the industry average of 15m²:

4 Leeuwen - **14,7 m²**
9 Dorp - **12,7 m²**
Government Garage - **11,4 m²**



The square meterage per desk performance in all the CBD leased properties except Norton Rose improved in the year under review. Atterbury House and Grand Central had the best improvement at 19% and 13%, respectively. It is noteworthy that, 11 Leeuwen (9,92m²) and Atterbury House (11,87m²) were also below the industry average of 15 m² per desk.



Non-CBD offices

9 non-CBD offices report that
the current m² per desk exceeds 20 m²

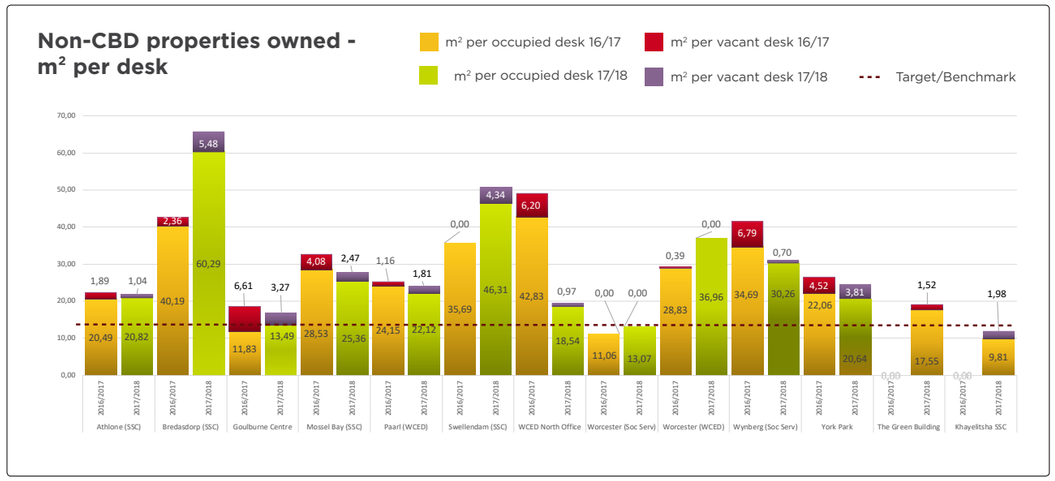
Most of the buildings where substantial improvements can be made are in non-CBD owned buildings

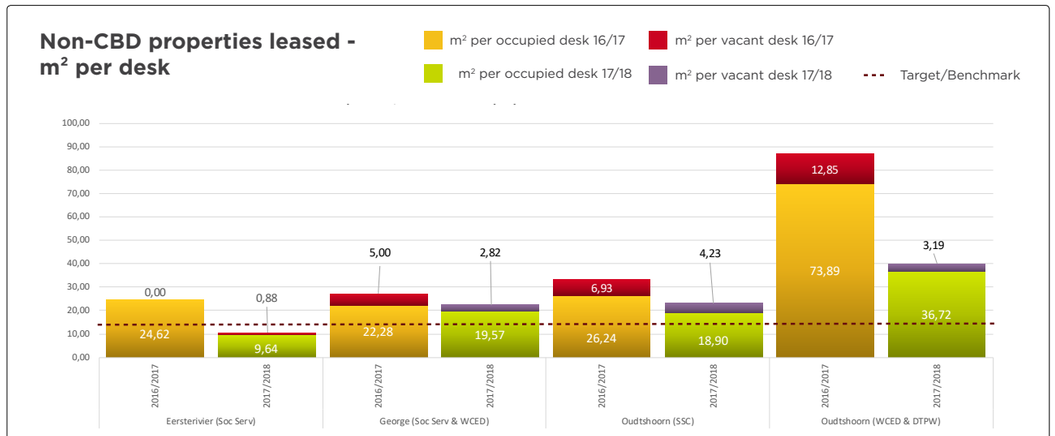
The sample size of non-CBD owned properties increased in the period because the Green Building and Khayelitsha Shared Service Centre (SSC) were added to the portfolio.

Six of the buildings that have been in the portfolio for longer than two years have shown an increase in the m² per number of desks occupied. Bredasdorp SSC showed the worst performance in this regard, with an increase in space from 40m² to approximately 60m², followed by Swellendam SSC and Worcester with an increase in space per desk of 41% and 26,5% respectively. In nine of the non-CBD offices, the current m² per desk still exceeds 20m², while Goulburn Centre (13,49m²), Worcester (Social Services) (13,07m²) and Khayelitsha SSC (9,81 m²) are all below the industry average of 15m².

All the non-CBD buildings improved their space efficiencies with Eersterivier (Social Services) and Oudtshoorn (WCED and DTPW) being the star performers, improving their efficiency by more than 50%. Eersterivier (Social Services) has the best space efficiency at 9,64m², which is over a third better than the 15m² private sector benchmark.

Chapter 2: Space utilisation





Office Modernisation projects 2017/18

24% Improvement in desk efficiency

The below table highlights the Modernisation projects that were concluded during the reporting period. The number of desks improved from **246 to 306**, if we calculate the post modernisation performance to the pre-modernisation performance the space efficiency figure of 24%.

Union House

Floor	Usable Area m²	Number of desks		m²/desks before	m²/desks after modernisation
		Pre-Modernisation	Post-Modernisation		
2	514	34	45	15,12	11,42
4	476	41	49	11,61	9,71
5	513	21	47	24,43	10,91
6	475	45	39	10,56	12,18
8	473	38	42	12,45	11,26
10	503	20	29	25,15	17,34

4 Dorp

11	733	47	55	15,60	13,33

CHAPTER 3: Performance measurement cost

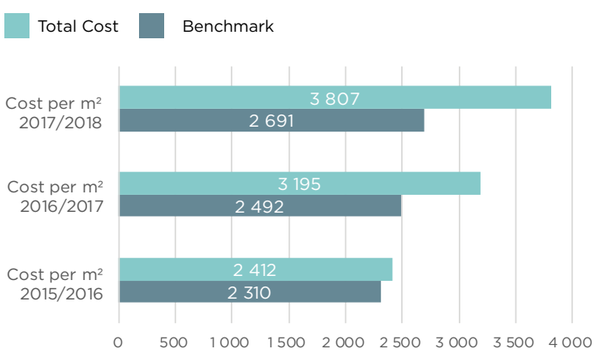
The capital expenditure in this reporting period increased and, as a result, **the portfolio's total cost per m² increased**

As any responsible custodian of immovable property, the Department continued to invest in its occupied office accommodation. As with any organisation, the budget for infrastructure investment is limited, and important projects are prioritised. From the data provided, the Department has given preference to finalising significant cost projects in the CBD portfolio with limited investment in the non-CBD portfolio.

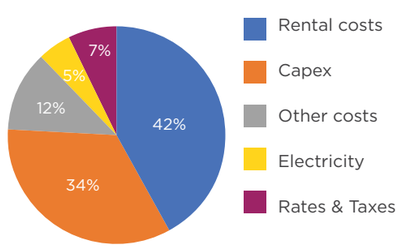
40%

Overall, 40% more per m² was spent on costs associated with the portfolio

Total cost per m² vs private sector benchmark



Percentage breakdown of main cost items

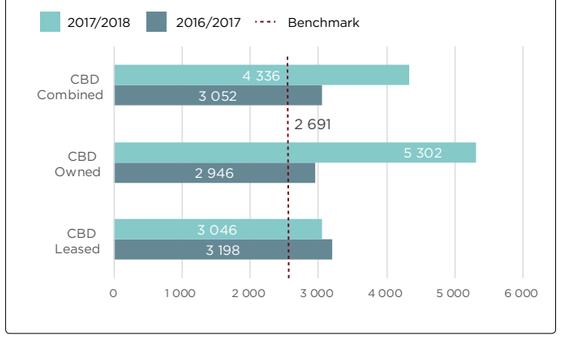


The 40% increase in costs associated with the portfolio is mainly due to continued expenditure on the upgrade of infrastructure and efficiency incentives, such as off-grid solar PV electricity generation systems, waterless urinals, supplementary water supplies from groundwater sources, and the new heating, ventilation and air conditioning plants (HVAC) in some of the buildings, to name but a few. Significant budget was allocated to 9 Dorp Street and York Park.

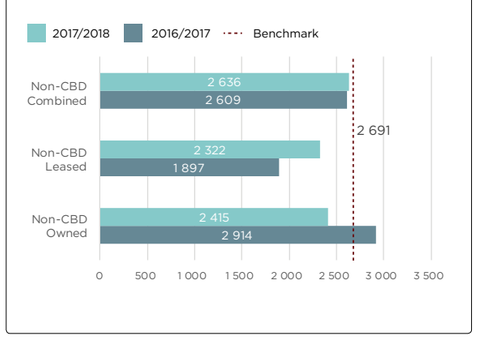
The private sector benchmark shows nominal growth which can be attributed to the current weak economy; private investors and landlords are limiting large capital expenditure, and only priority items tend to receive attention.

Lease obligations and rental costs account for approximately 42% of the total cost in 2017/2018, followed by capital expenses at 34% (capital works and maintenance). Rates and taxes remain high on the costs rankings making up 7%, with electricity at 5% of the total cost of the PER portfolio. Water and sewerage, security and cleaning are included under other costs making up 0,7%, 4% and 6% of the total costs respectively.

CBD properties - cost per m²



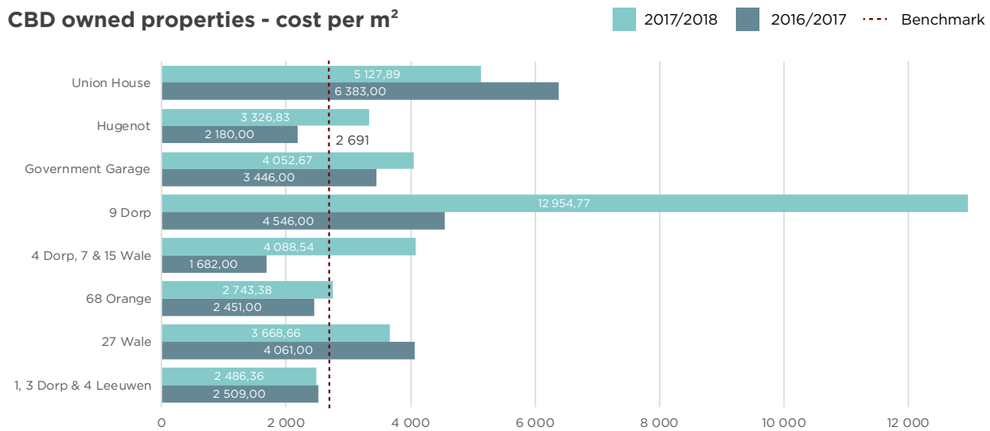
Non-CBD properties - cost per m²



Non-CBD owned properties had a reduction in costs of 17% year-on-year, while non-CBD leased premises had an increase of 22% in costs. The 22% increase is due to high scheduled maintenance costs at Oudtshoorn (WCED & DTPW) and Oudtshoorn (SSC). Combined, the cost of non-CBD buildings only increased by 1% over the reporting period.

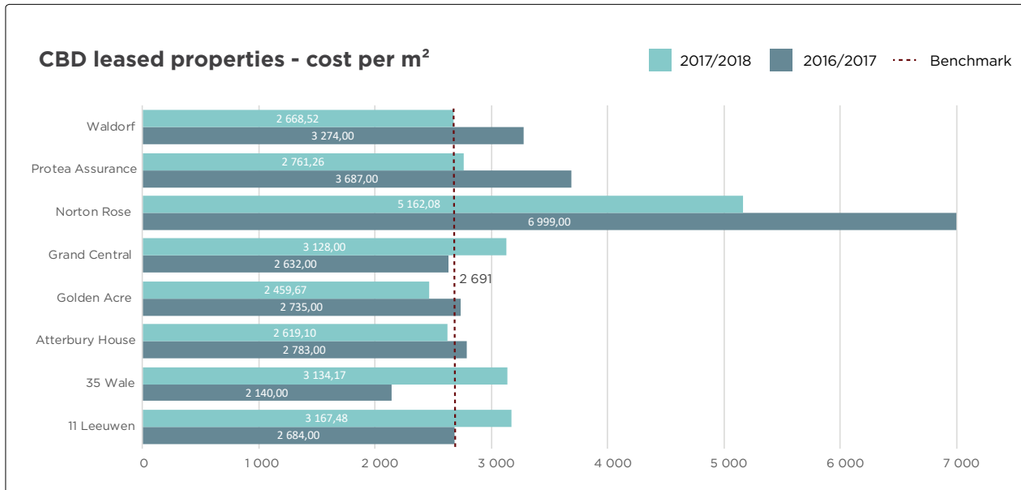
Cape Town CBD offices

CBD owned properties - cost per m²



The largest cost increase was at 9 Dorp Street, This was due to capital and maintenance expenditure undertaken during the reporting period.

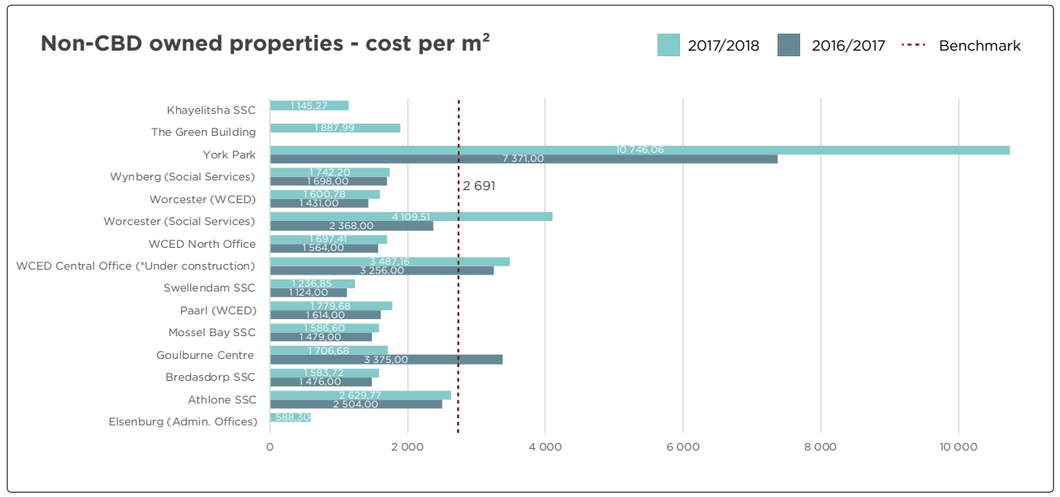
CBD leased properties - cost per m²



CBD leased premises costs decreased by 4%, predominantly due to a significant reduction in rental cost at Norton House. Despite the above, five buildings performed above the private sector benchmark of R2 691 cost per m².

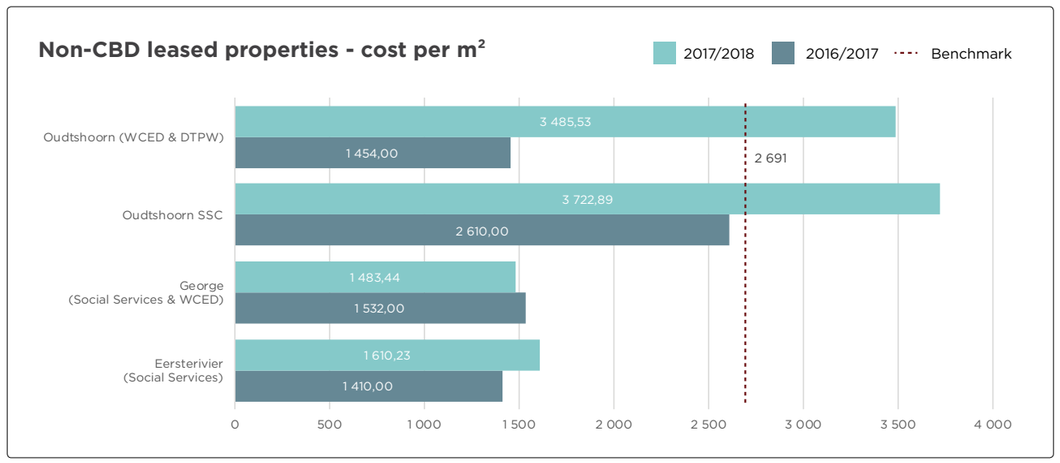
Non-CBD Offices

It is the first year that the Green Building and Khayelitsha SSC have been included in the non-CBD owned properties portfolio. For this report we have excluded the building cost of the Green Building, as the complete cost figure would have skewed the data analysis when looking at the portfolio as a whole. A case study on the Green Building can be found on page 25 of this report.



The most significant capital amount was spent on York Park during the reporting period. This was attributable to Office Modernisation costs, capital projects and scheduled maintenance costs. Of the properties in this PER portfolio, 10 performed below the private sector benchmark of R2,691 per m². Although this appears positive, it could also indicate a lack of maintenance and investment in general infrastructure.

The Green Building is still very new, and various contracts are still in place due to builders and multiple contractors' product warranties.



Oudtshoorn (WCED & DTPW) and Oudtshoorn SSC had significant increases in costs per m² as both buildings received scheduled maintenance during the period. George (Social Services & WCED) and Eersterivier (Social Services) are both below the private sector benchmark of R2 691 per m².

GAVIN KODE
Deputy Director-General, Provincial Public Works

CHAPTER 4: The way forward

Our original management rationale for publishing a report of this nature remains the same; namely, the measurement of property performance data, the regular and rigorous monitoring of that performance data and the management of the opportunities that present from that. We have made significant progress over the years to improve in all of these areas but during this last reporting period, we have been able to demonstrate the greatest return from this methodology. This is as a result of the water crisis into which we were thrust in early 2017.

The case study on pages 20 and 21 of this report bears testimony to our commitment to these principles and our ability to respond accordingly. The year-on-year water use reduction in the size-significant CBD office portfolio from 0,99 kL/m²/pa in 2016/17 to 0,72 kL/m²/pa in 2017/18 is laudable. In the situation as we found ourselves with the water crisis, it was our ability to manage the opportunity in the crisis that was most encouraging and enabled the success that we realised. I have previously outlined some of the necessary parts to the greater strategy, all of which have now been brought to bear in the water crisis and we now have a very credible success story to tell. We are accordingly emboldened in our efforts to press on with these initiatives, as we can see the fruit of these labours more clearly now.

The historical appointment of what we have called our Resource Champion has been an important addition to our capabilities and all efforts will now be applied to making this role a permanent part of the organisational design of Public Works. This resource has provided that critical link between, on the one hand, the data and the opportunities but also, on the other hand, the link between the asset managers and the occupants and the building technical personnel. We will also be formalising and institutionalising the role of the Resource Champion with the development of Standard Operating Procedures and extending the capability of the Resource Champion with Resource Managers across the WCG to align and coordinate these efforts. Although we have previously engaged with our landlords on all aspects of efficiency, we now plan to bolster our efforts through the Resource Champion to enforce minimum efficiency standards with regard to our leased portfolio.

Significantly, the Department has from April 2018 provided monthly consumption, utilisation and performance data to Accounting Officers and Facility Managers. The rollout of these monthly Consumption Reports and Facility Management Reports promote accountability by Accounting Officers and are assisting facility managers to take ownership of the consumption in their buildings to drive behavioural change by being conscious of consumption dynamics. Whereas this information was only previously provided through the annual PER, this is now much more timely and therefore markedly more relevant. The rollout of these reports and the facilities covered is continuously growing with buildings (including leased buildings) coming online for water and electricity time-of-use metering and being linked into our real-time desktop monitoring capability.

I would be remiss not to mention the notable progress made in our rooftop solar PV programme where 14 WCG facilities already have or are receiving plants, which will come into operation in the next reporting period (also see case study on page 13). What is further notable is that all plants are capable of being monitored in real time from our desktops or mobile devices.

To date, we have approximately 5 861 panels with installed capacity of 1 869 kWp generating approximately 3 163 MWh of renewable energy for the WCG per annum. Although we are only providing about 10% of the energy demanded per facility, every kilowatt hour of renewable energy generated is a kilowatt hour of unsustainable energy saved. We have assessed a further 6 facilities for feasibility and will continue to expand this initiative wherever possible and where funds can be directed to the valuable programme.

As custodian of the WCG's property portfolio, Public Works is currently crafting an asset management strategy and framework that will enable us to move from managing assets within our portfolio to asset management. Asset management in this sense is the coordinated activities of an organisation, carried out over an asset's whole lifecycle, to realise full value from assets in delivering their service delivery objectives. Realisation of this full value normally involves a balance of costs, risks, opportunities and performance benefits in and according to an asset management system. In pursuit of this asset management system, we are developing an enterprise-wide property management system which will strengthen existing structures to ensure the creation of a robust information base with both property management and management reporting systems to support management decisions and therefore a more holistic approach to asset management through multi-disciplinary management teams. The use of smart monitoring and recording technology, such as utilisation sensors and drones, will then link into our system and revolutionise our ability to measure, monitor and manage the immovable assets in our care by providing better accountability, sustainability, risk management and service maximisation.

The case study in this report (pages 20 and 21) on the Provincial Water BCP programme sets out not only how the WCG contributed to avoiding a 'dry taps' situation but also how the WCG could respond in a situation whereby normal municipal water supply was constrained or curtailed. Although the so-called 'Day Zero' was a constantly shifting metric, most interventions undertaken during the programme were permanent changes and designed to improve the resilience of the WCG to future water shocks and upcoming stresses. A fundamental premise in the Water BCP Programme was that climate change is a reality and therefore, our efforts had to be in the pursuit of resilience.

All our efforts going forward and in all respects as immovable asset manager must therefore be directed at sustainability, resilience and efficiency. As we have seen since our first publication of this report, we have to keep trying to do as much as possible as soon as possible towards these objectives. In this regard, I am reminded of Martin Luther King Jr.'s quote: "If you can't fly, then run, if you can't run, then walk, if you can't walk, then crawl, but by all means keep moving."

Chapter 5: Portfolio overview

Building	Size m² 2017/2018	CBD or Non-CBD	Owned or Leased	Desk	Elec consumption (Kwh) 2016/2017	"Elec consumption (Kwh) 2017/2018 Metering"	Upward/ Downward	Water consumption KL/m² 2016/2017	Water consumption KL/m² 2017/2018	Upward/ Downward	"FTE 2016/2017"	"FTE 2017/2018"	Upward/ Downward
11 Leeuwen Street	1 726	CBD	Leased	157	275 582,26	272 053,99	-3 528,27	6 999,33	7 075,05	75,72	131,00	142,00	11,00
35 Wale Street	5 564	CBD	Leased	329	631 410,00	604 553,16	-26 856,84	0,00	0,00	0,00	308,00	331,00	23,00
Atterbury House	6 160	CBD	Leased	429	1 344 153,00	940 527,04	-403 625,96	7 741,00	6 168,20	-1 572,81	361,00	449,00	88,00
Golden Acre	8 745	CBD	Leased	477	2 495 139,00	2 307 431,26	-187 707,74	7 437,60	7 114,94	-322,66	432,00	495,00	63,00
Grand Central	18 722	CBD	Leased	789	5 073 377,98	4 662 667,50	-410 710,49	30 862,46	9 017,68	-21 844,78	689,00	793,00	104,00
Norton Rose	5 282	CBD	Leased	309	1 072 857,00	987 870,00	-84 987,00	6 307,57	6 709,80	402,23	263,00	279,00	16,00
Protea Assurance	6 888	CBD	Leased	312	1 022 421,83	676 284,16	-346 137,67	2 323,19	11 637,68	9 314,49	301,00	319,00	18,00
Waldorf	9 817	CBD	Leased	589	2 351 458,00	3 017 367,00	665 909,00	10 951,81	9 461,88	-1 489,93	457,00	452,00	-5,00
1, 3 Dorp & 4 Leeuwen Street	7 002	CBD	Owned	407	463 492,60	562 668,68	99 176,08	7 260,70	3 818,49	-3 442,20	340,00	273,00	-67,00
1 Dorp Street	3 644	CBD	Owned	195	0,00	426 192,82			3 172,46		158,00	160,00	2,00
3 Dorp Street (* Under modernisation)	1 567	CBD	Owned	96	0,00	0,00			0,00		88,00	n/a	n/a
4 Leeuwen Street	1 791	CBD	Owned	116	0,00	136 475,86			646,03		94,00	113,00	
27 Wale Street	11 166	CBD	Owned	562	1 838 127,80	1 553 093,18	-285 034,62	7 272,00	3 977,43	-3 294,57	440,00	576,00	136,00
68 Orange Street	1 368	CBD	Owned	74	0,00	143 422,03		2 031,24	448,89	-1 582,35	71,00	71,00	0,00
4 Dorp, 7 & 15 Wale Street	41 420	CBD	Owned	1811	6 821 760,00	5 552 501,01	-1 269 258,99	12 147,62	14 087,38	1 939,77	1 579,00	1 330,00	-249,00
4 Dorp Street	18 365	CBD	Owned	n/a	0,00	3 284 825,49			9 505,49		0,00	943,00	
7 & 15 Wale Street	23 055	CBD	Owned	n/a	0,00	2 267 675,52			4 581,89		0,00	458,00	
9 Dorp Street	13 039	CBD	Owned	908	2 517 414,17	2 048 573,38	-468 840,79	11 820,74	4 480,24	-7 340,50	604,00	786,00	182,00
Government Garage	2 332	CBD	Owned	162	452 396,08	555 669,62	103 273,54	4 035,82	2 008,38	-2 027,44	117,00	172,00	55,00
Government Garage (Roeland Street)	1 192	CBD	Owned	n/a	0,00	300 900,42			1 285,01		0,00	89,00	
Government Garage (Hope Street)	1 140	CBD	Owned	n/a	0,00	254 769,20			723,37		0,00	83,00	
Hugenot	2 123	CBD	Owned	120	96 083,00	89 807,40	-6 275,60	2 287,94	2 315,66	27,72	105,00	95,00	-10,00
Union House	5 601	CBD	Owned	369	746 772,64	663 650,32	-83 122,32	15 461,53	12 534,88	-2 926,64	308,00	266,00	-42,00
Eersterivier (Social Services)	1 157	Non-CBD	Leased	47	154 836,87	159 549,32	4 712,45	0,00	1 304,03	1 304,03	47,00	110,00	63,00
George (Social Services & WCED)	4 500	Non-CBD	Leased	202	329 292,02	353 099,91	23 807,89	12 075,00	14 143,78	2 068,78	165,00	201,00	36,00
Oudtshoorn SSC	1 758	Non-CBD	Leased	67	45 338,80	48 020,00	2 681,20	2 390,91	1 383,00	-1 007,91	53,00	76,00	23,00
Oudtshoorn (WCED & DTPW)	1 836	Non-CBD	Leased	27	30 240,50	38 372,11	8 131,61	362,75	389,24	26,49	23,00	46,00	23,00
Elsenburg (Admin. Offices)	10 804	Non-CBD	Owned	n/a	1 093 642,00	991 195,52	-102 446,48	0,00	0,00	0,00	n/a	433,00	n/a
Athlone SSC	6 557	Non-CBD	Owned	320	388 941,00	666 816,06	277 875,06	6 012,86	5 188,72	-824,14	293,00	300,00	7,00
Bredasdorp SSC	2 894	Non-CBD	Owned	72	100 521,87	164 771,71	64 249,84	4 626,83	1 349,67	-3 277,16	68,00	44,00	-24,00
Goulburne Centre	2 213	Non-CBD	Owned	187	178 110,30	159 730,56	-18 379,74	4 883,78	2 170,67	-2 713,11	120,00	132,00	12,00
Mossel Bay SSC	1 141	Non-CBD	Owned	40	40 196,00	36 332,82	-3 863,18	590,98	765,58	174,60	35,00	41,00	6,00
Paarl (WCED)	2 632	Non-CBD	Owned	109	222 284,31	184 911,23	-37 373,08	1 856,00	4 564,50	2 708,50	104,00	110,00	6,00
Swellendam SSC	1 621	Non-CBD	Owned	45	6 882,52	7 313,14	430,62	240,33	691,44	451,11	45,00	32,00	-13,00
WCED Central Office (* Under construction)	1 902	Non-CBD	Owned	196	146635,264	0			0	0	164	147	-17,00
WCED North Office	3 726	Non-CBD	Owned	87	241 832,24	266 238,16	24 405,92	1 472,82	1 221,91	-250,91	76,00	191,00	115,00
Worcester (Social Services)	1 150	Non-CBD	Owned	104	147 887,02	118 922,40	-28 964,62	598,00	497,48	-100,52	104,00	88,00	-16,00
Worcester (WCED)	4 324	Non-CBD	Owned	150	0,00	164 554,56	164 554,56	643,00	1 401,40	758,40	148,00	117,00	-31,00
Wynberg (Social Services)	4 024	Non-CBD	Owned	116	309 512,75	203 357,64	-106 155,11	6 998,64	4 487,75	-2 510,89	97,00	130,00	33,00
York Park	6 749	Non-CBD	Owned	306	1 741 812,71	1 599 751,55	-142 061,16	4 555,00	4 829,16	274,16	254,00	276,00	22,00
The Green Building	6 615	Non-CBD	Owned	n/a	n/a	834 660,00	n/a	n/a	n/a	n/a	n/a	347,00	n/a
Khayelitsha SSC	2 687	Non-CBD	Owned	n/a	n/a	316 580,00	n/a	n/a	n/a	n/a	n/a	228,00	n/a

Acknowledgements

The 7th edition of the Property Efficiency Report bears testament to the dedication and hard work of all stakeholders involved across the entire immovable asset management and general infrastructure space of the DTPW. The efficiency results truly speak for themselves and highlight the positive impact of the interventions undertaken by the Department during the reporting period.

Data collection and analysis once again proved to be the most challenging aspect of compiling the report, however, as trust for the remoting metering system builds, together with the improved understanding of the various data sources, so will the confidence in compiling the report.

Personally, I would like to thank all who contributed to the good story which the report highlights. The WCG truly does work “Better Together”, as this was made clear once again through the continuation of the good story told through the Property Efficiency Report series.

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Data Sources:
Department of Transport and Public Works:
- Chief Directorate: Immovable Asset Management (Property Support Office; Operational Property Management; Property Planning and Information)
- Chief Directorate: General Infrastructure (Technical Support; Programme/ Projects Infrastructure Delivery)

Department of Community Safety

Elsenburg
Administration Office

York Park

Glossary

APP	Annual Performance Plan
BBBEE	Broad-based Black Economic Empowerment
Benchmark	In this report, the portfolio is benchmarked against a comprehensive database of office buildings in the same geographical area compiled by the Green Building Council of South Africa (GBCSA).
Capital Expenses	Includes capital and maintenance expenditure
CBD offices	The 2017/18 report includes the 19 WCG offices located in the Cape Town CBD. The estate comprises around 146 955 m^2 of occupied office space. A list of buildings is featured in the portfolio overview (Chapter 5).
DEADP	Department of Environmental Affairs and Development Planning
DTPW	Department of Transport and Public Works
FTE	Full time equivalent (staff)
GBCSA	Green Building Council of South Africa
Immovable Assets	Immovable property is an immovable object, an item of property that cannot be moved without destroying or altering it – property that is fixed to the earth, such as land or a building.
kWh	The kilowatt hour is a unit of energy equal to 1,000-watt hours. The kilowatt hour is the most commonly known unit to measure energy delivered. Average annual power consumption can be expressed in kilowatt hours per year, per square metre or per FTE user.
Non-CBD offices	The 2017/2018 report includes the 20 WCG offices located outside of the Cape Town city area. The estate comprises around 51 000 m^2 of occupied office space. A list of buildings is featured in the portfolio overview (Chapter 5).
Occupancy costs	Those costs related to occupying a space including; rent, real estate taxes, personal property taxes, insurance on building and contents, repairs and maintenance, depreciation and amortisation expenses.
Occupied space (Usable Area)	The net internal area, measured in square metre, of office space occupied by organisations. The space has been defined in accordance with SAPOA guidance and is equivalent to the SAPOA usable area.
Office estate	The report examines the performance of 39 offices, which represent around 215 245 m^2 of occupied office space. The estate represents the vast majority of the provinces office accommodation.
Performance	Performance of the Western Cape office estate has been assessed using three standard metrics of property efficiency (cost per square metre, space per FTE and cost per FTE) to report internal efficiencies and also through comparison to a benchmark average of South African corporate occupiers. Additionally, sustainability performances have been assessed using data to develop energy and water consumption metrics.
Property Efficiency Report Portfolio	The portfolio under report remains at 39 office buildings, being all leased-in and owned office accommodation throughout the province greater than 1,000m^2. The change is due to combining 4 Dorp and 7 & 15 Wale for reporting purposes.
Public Works	The Western Cape Department of Transport and Public Works (DTPW). Public Works develops and maintains appropriate infrastructure and related services for sustainable economic development which generates growth in jobs and facilitates empowerment and opportunity.
Reporting period	The reporting period for the Property Efficiency Report is from 1 April 2017 to 31 March 2018.
SAPOA	South African Property Owners' Association
SSC	A shared service centre (SSC) is an office building occupied by various WCG departments and often with shared facilities and a public interface.
Other departments and components that contributed information	Resource Efficiency and Property Systems Manager General Infrastructure Department of Social Development Supply Chain Management Operational Property Management Property Support
WCG	Western Cape Government

Drill rig in operation

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