



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. 8.

## Portfolio breakdown



# 39 = 214 506m<sup>2</sup>

buildings



### 28 Owned buildings

15 Non-CBD

58 973m<sup>2</sup>

11 CBD

82 484m<sup>2</sup>

2 EXCLUDED\*

3 469m<sup>2</sup>

\* 1 currently under modernisation

\* 1 excluded due to complex and unverifiable data (under review)



### 11 Leased buildings

03 Non-CBD

7 415m<sup>2</sup>

08 CBD

62 165m<sup>2</sup>

## Key performance indicators

### Electricity



The Portfolio is **35% more efficient** than the private sector



Owned buildings are **29% more efficient** than leased buildings

### Energy



## 2%

of the total energy consumption in the portfolio is generated by our Solar PV Plants

### Water



Consumption **reduced by 9%** from last year

Consumption has **improved by 30%** over the past 3 years

The portfolio is performing **33% better** than the private sector

Our owned buildings were **36% more efficient** than the leased buildings

### Space



The portfolio **improved its space utilisation** by 10%

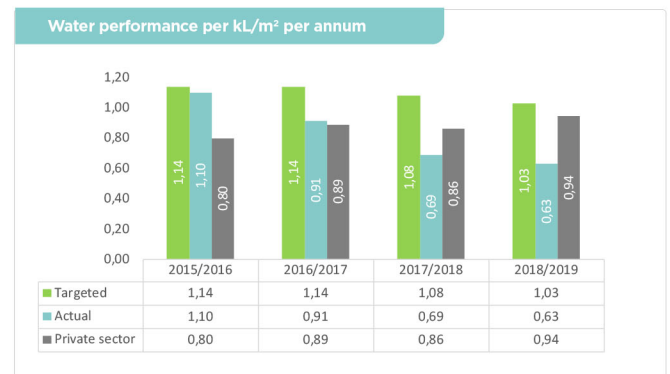
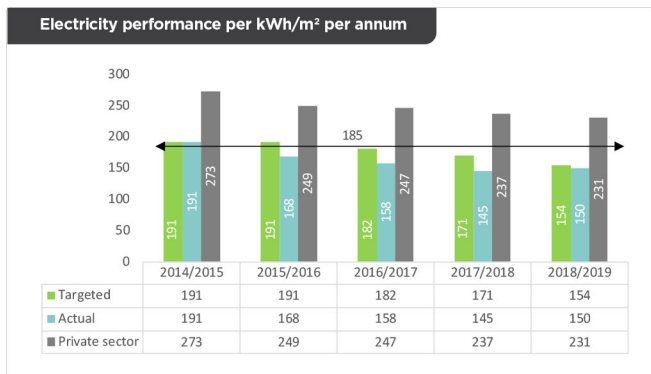
15m<sup>2</sup>/desk

CBD owned buildings achieved the 15m<sup>2</sup> per desk target

Space utilisation across the portfolio has **improved by 37%** since 2016/17

	2017/2018						2018/2019					
	All WCG offices	All leased buildings	All owned buildings	CBD offices	Non-CBD offices	Private Sector	All WCG offices	All leased buildings	All owned buildings	CBD offices	Non-CBD offices	Private Sector
WC portfolio net area	215 245	72 155	143 090	145 388	68 290	-	214 506	69 580	144 926	148 118	66 388	-
WC portfolio performance data	211 776	72 155	139 621	143 486	68 290	-	211 037	69,580	141 457	144 649	66 388	-
Accommodated office staff	9 949	3 693	6 256	6 900	3 049	-	11 168	3 633	7 535	7 902	3 266	-
Cost R/m <sup>2</sup>	3 807	2 953	4 291	4 336	2 636	2 691	3 097	2 842	3 222	3 205	2 861	2 907
Cost R/FTE	81 640	57 697	93 285	92 351	57 401	-	59 716	55 187	61 921	58 669	62 437	-
m <sup>2</sup> /FTE	23	20	22	20	26	-	19	19	19	18	22	-
m <sup>2</sup> /Desk	19	17	20	18	21	15	17	17	17	16	20	15
Energy kWh/m <sup>2</sup> /pa	145	194	118	169	96	236	150	186	131	177	90	R231
Water kL/m <sup>2</sup> /pa	0,69	1,03	0,50	0,72	0,95	0,86	0,63	0,73	0,47	0,54	0,76	0,94

## Environmental Performance Summary



### Electricity Performance against Private Sector Benchmark

Performance (kWh/m<sup>2</sup>)

**150**

Portfolio Performance

**231**

Private Sector Benchmark

**177**

All CBD

**90**

All Non CBD

**131**

All Owned

**186**

All Leased



### Water Performance against Private Sector Benchmark

Performance (kL/m<sup>2</sup>)

**0,63**

Portfolio Performance

**0,94**

Private Sector Benchmark

**0,54**

All CBD

**0,76**

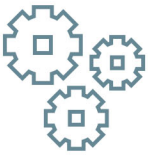
All Non CBD

**0,47**

All Owned

**0,73**

All Leased



**Overall improvement in space efficiency**

**Space efficiency of 17m<sup>2</sup> per desk**

**Office Modernisation Programme remains on track**

**Desk/Space utilisation in completed Modernisation projects improved by 27%**



**Approximately 1 200 additional staff**



**Total electricity consumption per kWh/m<sup>2</sup>/pa increased by 3,4%**



**The portfolio currently outperforms the industry benchmark by 19%.**

**The portfolio also outperforms the private sector benchmark by 35%.**

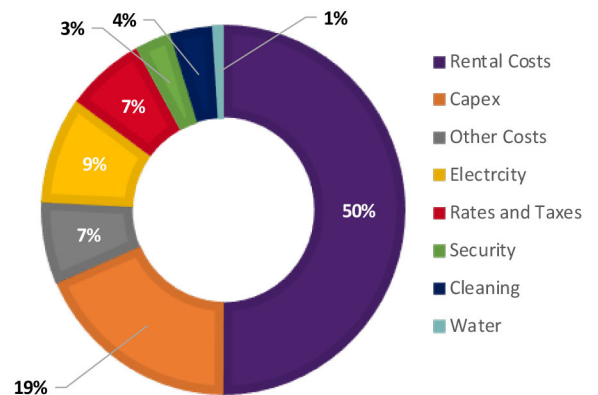


**3 Dorp Street is the first building in the Cape Town CBD to make use of blackwater.**



**This edition separates the performance of CBD and non-CBD buildings, as well as owned against leased buildings.**

**Percentage breakdown of main cost items**



**19%**  
**Total cost decreased**

## Case Study: **Rooftop solar photovoltaic systems**

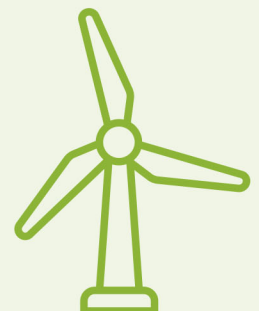


**10-year simple average payback period**

3 888 MWh/year savings

R3 648 084 minimum savings/year

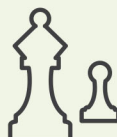
The lowest pay back period is 8.1 years



## **Other benefits**



The provision of skills training in renewable energy technologies.



Targeted procurement from small- and medium-sized enterprises.

# Case Study: 3 Dorp Street

The modernisation of the Department of Environmental Affairs and Development Planning (DEA&DP) building at 3 Dorp Street has been one of the most ambitious projects undertaken in the DTPW efficiency and sustainability programme. This jewel in the crown of the WCG office portfolio features exemplary creative and sustainable redesign. The project sets an impressive precedent for other buildings in the Cape Town CBD to follow.

The renovation process was undertaken in one tranche rather than the phased, floor-by-floor approach that has been used in other WCG modernisation projects. All DEA&DP staff were decanted to other CBD office accommodation for the duration of the project – between October 2017 and February 2019.

The result is a building complex with a plethora of world best practices and innovations presented through a beautiful architectural design. The external façade and the building's unique sunscreens have been featured in the opening credits of DSTV's popular cooking show "Kokkedoor". It is fast becoming an iconic corner of Long Street for tourists and locals.

Some ways in which this building is leading the way are shown below.



## Energy efficiency

Heating, ventilation and air-conditioning is regulated through a building management system that is tuned for current seasonal temperatures. This helps to optimise electricity usage.

Double-glazed windows work with the bespoke designed sunscreens to significantly reduce the building's heat gain during the day.

The building is fitted with motion sensors that turn the lights off in spaces that are not being used.



## Workplace design

Great care was taken in the design of staff workspaces. The result is a perfect balance between space optimisation and employee comfort in accordance with the Occupational Health and Safety Act and National Building Regulations and Building Standards Act.

The new standard design enabled an increase in the workspace capacity of almost 30%. Before modernisation, the desk space of a work station was 13m<sup>2</sup>. After modernisation, space per desk stands at 10m<sup>2</sup>.



## Water recycling

This is currently the only building in the CBD that recycles blackwater (sewage water). An estimated 1 million litres per annum is captured from this single building. Any water that is not re-used for the flushing of toilets is rerouted to the lush, rooftop garden.

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# Case Study: Remote metering case study

## Installed meters

# 792

meters in place at the time of publication

- 627 live remote electricity meters
- 123 water meters
- 8 pressure meters
- 34 solar PV meters

The auto-alert system automatically sends email notifications to the DTPW maintenance call centre and, in some cases, selected officials who can resolve the issue at hand. Alerts include:



- Water flowing at night
- Abnormally high electricity consumption
- Abnormally high water consumption
- Warnings that a solar PV system is offline



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