



Property Efficiency Report 2017/18

Executive Summary

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



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



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

Electricity

145,28 kWh/m² /pa

Total consumption was reduced by **8,15%**

236,54 kWh/m² /pa

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 as reduced by 24% within the portfolio during the reporting period

24%

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

0,86 kL/m² /pa

industry benchmark

Portfolio breakdown

39
properties

12

Leased properties

8

CBD

4

Non-CBD

26

Owned properties

11

CBD

15

Non-CBD

01

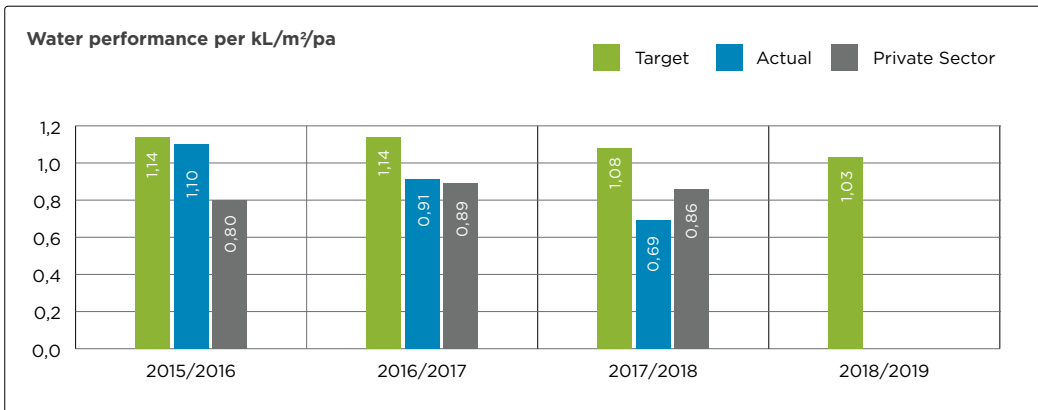
Under modernisation

Environmental performance

Types of buildings	Electricity benchmarks kWh/m ² /pa		Water benchmarks kL/m ² /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

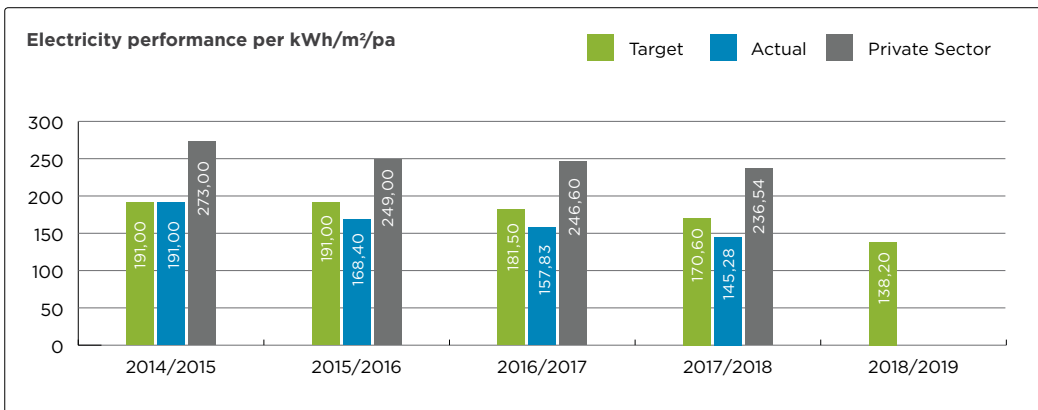
145,28
kWh/m²
/pa

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



Solar PV systems



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)

9 Dorp Street

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.

36%

Decrease in Municipal Consumption over the reporting period

12,7%

Total consumption of renewable energy

Water Business Continuity Plan

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

Space utilisation

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

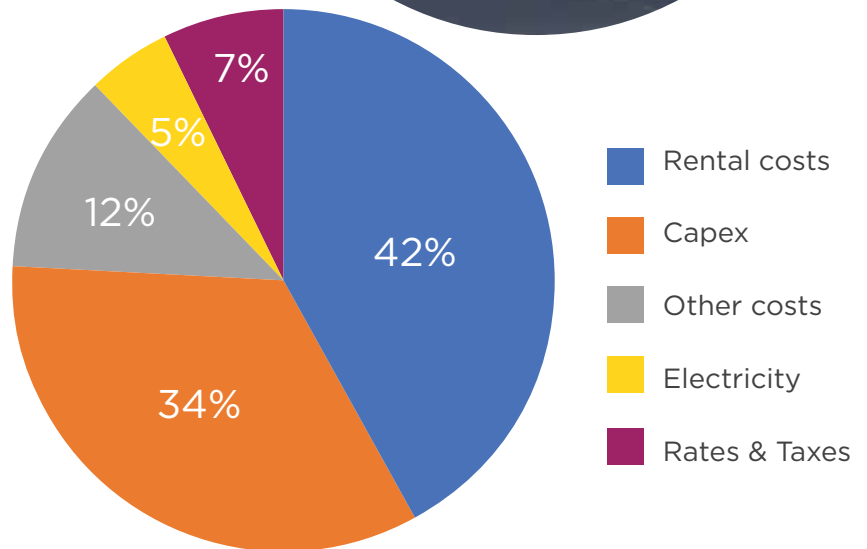
24% Improved desk efficiency on 7 recently modernised floors



Total Cost

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.

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



The Green Building



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



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 resources like 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 input on capital and maintenance resource savings projects
- Provide mentorship and training for resource champions and facility managers
- Report on resource utilisation, expenditure and savings
- Prepare resource management policies and savings strategies
- Implement the principles of Measure, Monitor and Manage

Remote metering

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.



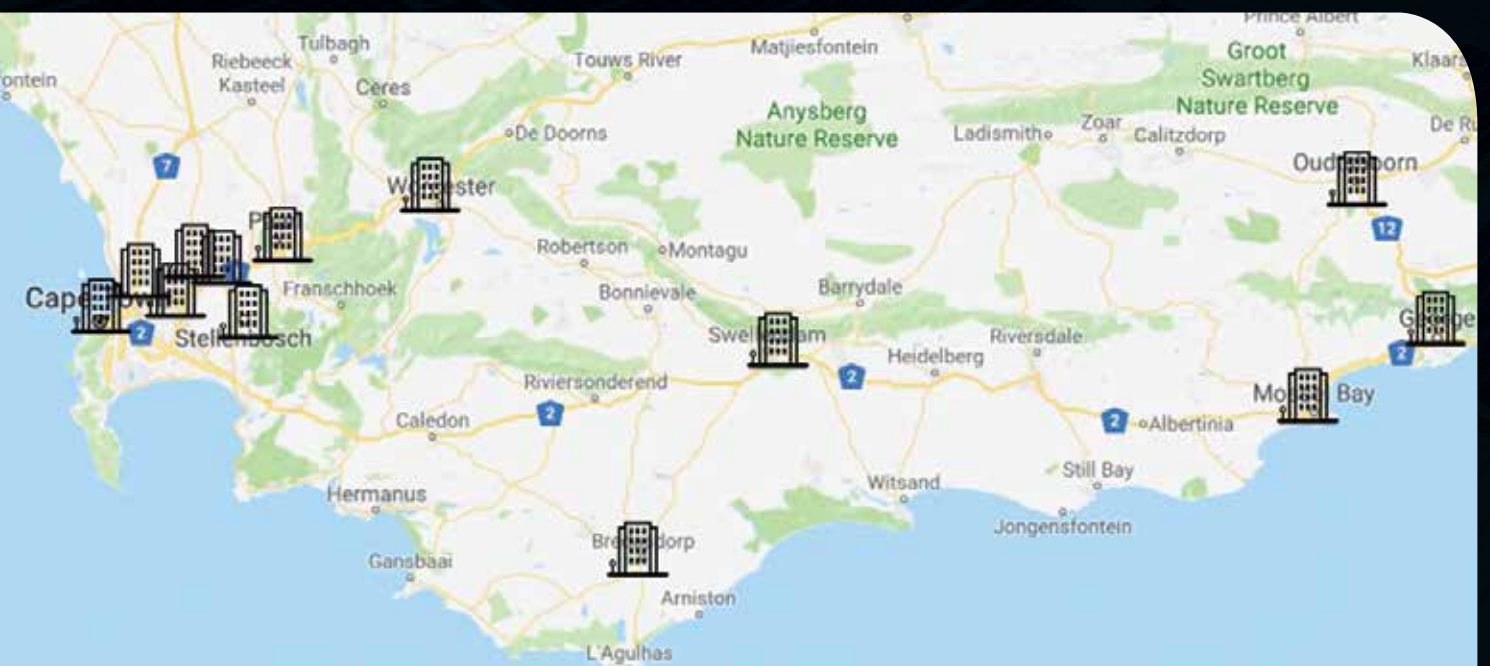
32
PER buildings



631
electricity meters installed



94
water meters installed



Location of portfolio buildings