

## **Property Efficiency Report 2022/23 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. 12



37 office buildings = 196.853 m<sup>2\*</sup> 8 buildings buildings

Health portfolio

22 health facilities = 774 530m<sup>2</sup>



clinics



hospitals

Education portfolio

45 education facilities = 294 946m<sup>2</sup>



15 high schools



primary schools

\*Referring to usable space.



Water

Non-CBD owned offices

kWh/m²/pa

**CBD** owned offices





**Primary** 

**Primary** 



Space utilisation

CBD leased buildings



**Performance** 

Non-CBD

measurement cost owned buildings R2 390



**Best performers** 

## **Building performance highlights**

2021/22

2022/23

	All WCG offices		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
WCG portfolio area	196 484	46 937	149 547	131 821	64 663	-	196 853	41 959	154 894	128 211	68 642	-
WCG portfolio performance data	191 092	46 937	144 155	130 453	64 663	-	191 461	41 959	149 502	126 843	64 618	-
Accommodated office staff	10 000	2 957	7 043	6 706	3 294	-	10 232	2 873	7 359	6 410	3 822	-
Cost/m²	3 108	3 651	2 938	3 321	2 673	2 178	2 833	3 687	2 566	3 032	2 429	2 309
Cost/FTE	74 908	72 270	75 990	81 357	62 386	-	62 623	67 595	60 611	73 895	45 105	-
m²/FTE	25	21	26	25	25	-	20	17	20	19	20	-
m²/desk	19	16	20	19	20	-	19	15	20	19	17	-
Energy kWh consumed per FTE/pa	2 514	2 650	2 460	2 874	1 841	-	2 443	2 227	2 531	3 050	1 499	-
Water kL consumed per FTE/pa	13	15	12	13	12	-	12	11	12	12	12	-
Energy kWh/m²/pa	106	134	97	117	82	216	113	136	107	130	81	240
Water kL/m²/pa	0.54	0.83	0.46	0.55	0.53	0.65	0.58	0.77	0.53	0.55	0.65	0.73

FTE = full-time equivalent.

Disclaimer: In the 11<sup>th</sup> edition of the PER, the cost/FTE was based on calculating an arithmetic mean (sum of all observations)/(number of observations). For this 12<sup>th</sup> edition, we decided to revert to the method used in previous issues which is dividing the total cost by the total number of full-time equivalents and to be consistent, the 2021/22 figures were recalculated using this method. For this reason, the 2021/22 figures published in this report differ from those published in the 11<sup>th</sup> edition.



#### Office electricity

- Electricity consumption in the private sector, City of Cape Town and WCG buildings has increased over the reporting period.
- Annual electricity consumption per square metre (kWh/m²/pa) saw a year-on-year increase of 6.6%, rising from 106kWh/m²/pa to 113kWh/m²/pa during the reporting period.
- The owned buildings' consumption of  $107kWh/m^2/pa$  is 21.3% better than the leased buildings' consumption of  $136kWh/m^2/pa$ .
- All leased buildings increased their consumption from 134kWh/m²/pa to 136kWh/m²/pa, an increase of 1.5% compared to the previous reporting period.
- The buildings that produce the largest proportion of their electricity consumption from solar sources are the new Government Motor Transport (GMT) building in Maitland at 38.3%, Goulburn Centre at 22.4%, and Elsenburg (Admin. Offices) at 19.3%.



#### Office water

- Water consumption during the 2022/23 reporting period increased from 0.54kL/m²/pa to 0.58kL/m²/pa, a 7.4% year-on-year increase.
- At 0.53kL/m²/pa, the consumption performance of owned buildings surpasses that of leased buildings (0.77kL/m²/pa) by a noteworthy 31.2%.
- Non-CBD leased buildings demonstrated a significant reduction in consumption of more than 18.3% throughout the reporting period, declining from 1.36kL/m2/pa to 1.11kL/m²/pa.



Electricity
performance
against private
sector benchmark

All office building performance (kWh/m²)

Portfolio performance

240
Private sector benchmark



Water performance against private sector benchmark

All office building performance (kL/m²)

0.58

0.73

Portfolio performance

Private sector benchmark



#### Health electricity

- All health facilities have demonstrated enhanced efficiency, with electricity consumption decreasing from 90kWh/m²/pa to 87kWh/m²/pa. This is an improvement of 3.3%.
- Clinics have exhibited the most substantial improvement, reducing their consumption from 82kWh/m²/pa to 73kWh/m²/pa. This is an impressive improvement of 10.9%.



#### Health water

- Hospital facilities have nearly returned to 2020/21 water consumption levels of 1.58kL/m²/pa.
- All health facilities have improved water consumption efficiency from 1.64kL/m²/pa in 2021/22 to 1.57kL/m²/pa in 2022/23.



### **Education electricity**

- High schools' efficiency improved from 22kWh/m²/pa to 18kWh/m²/pa, marking an impressive improvement of 18.2% over the reporting period.
- Primary schools have reached the same level of efficiency as in 2019/20.



#### **Education water**

- High schools have been the most significant water consumers, with a performance of 0.74kL/m²/pa, up from 0.62kL/m²/pa during the previous period, indicating a 19.4% decrease in efficiency.
- Primary schools have consistently performed well, although their water consumption slightly increased from  $0.48kL/m^2/pa$  in 2021/22 to  $0.49kL/m^2/pa$  in 2022/23, making them the top performers in this area.



## Space utilisation

- The All buildings portfolio showed an employee density improvement from 25m<sup>2</sup>/FTE in 2021/22 to 20m<sup>2</sup>/FTE in 2022/23, an improvement in space utilisation of 20%.
- The portfolio has had an average desk space utilisation of 19m²/desk over the past three years.



#### Occupancy cost

- The WCG study portfolio's cost of occupying office space has decreased by 8.8%, from R3 108/m<sup>2</sup> in 2021/22 to R2 833/m<sup>2</sup> in 2022/23.
- The private sector occupancy costs benchmark increased by 6% from R2 178/m² to R2 309/m² over the reporting period.

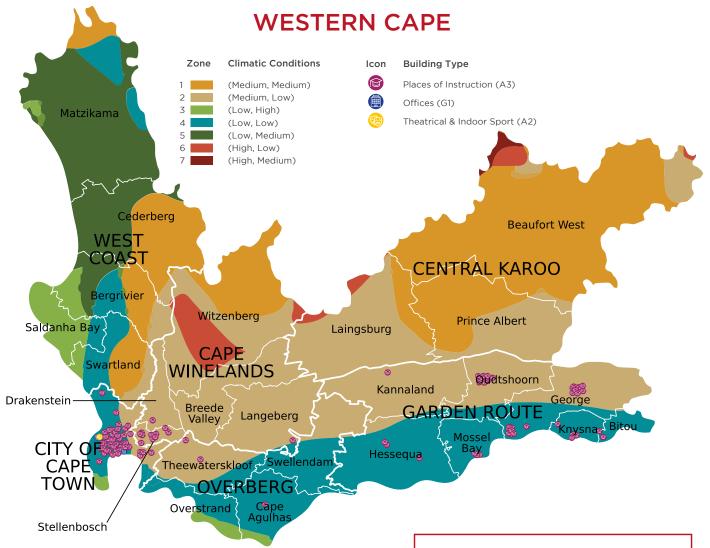
# Case study: Western Cape Government energy performance

On 8 December 2020, the Minister of Mineral Resources and Energy issued regulations under section 19(1)(b) of the National Energy Act requiring the submission and display of energy performance certificates (EPCs) by organs of state and the owners of three categories of non-residential buildings – G1: Office buildings, A2: Theatrical & indoor sport buildings, and A3: Places of instruction. This deadline was subsequently extended to 7 December 2025.

115
Energy
Performance
Certificates
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An EPC rates a building's energy efficiency using a scale of A to G, where A represents the most efficient building and G the least efficient. The mid-point D is determined through a comparison of the average metrics described in South African Building Standard SANS 10400-XA. To meet current compliance criteria, the building must fulfil the following conditions:

- It should have been in operation for at least two years without any significant renovations;
- It should primarily serve any of the following purposes: be a place of instruction, a place of entertainment, public assembly, theatrical and indoor sports, or an office; and
- It should have a net floor area of more than 2 000m<sup>2</sup> (in the case of privately owned buildings) or 1 000m<sup>2</sup> (in the case of state-owned buildings).

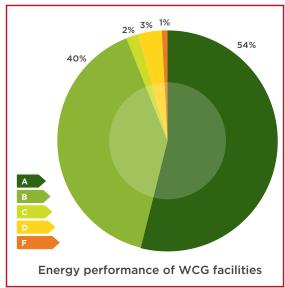


As at 31 October 2023, the WCG has obtained 115 EPCs; one for the Artscape Theatre Complex (A2), four for commercial office buildings (G1), and 110 for educational facilities (A3).

Over half (54%) of the EPCs obtained to date received an A energy performance rating, 40% received a B rating, 3% received a D rating (mostly G1 office buildings), and 1% receiving a rating of F.

Artscape reported an energy performance of  $81kWh/m^2$ , resulting in a D rating, which indicates an average energy intensity for the complex.

At an electricity consumption of  $104 \text{kWh/m}^2$ , both 4 Dorp Street and 7 & 15 Wale Street also received D ratings. The 9 Dorp Street building received an F rating for its consumption of  $138 \text{kWh/m}^2$ , comparable to other buildings of a similar age in the Cape Town



CBD. 9 Dorp Street was able to outperform the old benchmark of 185kWh/m² under SANS 10400 XA 2011, but was not able to meet or exceed the new benchmark of 95kWh/m² under SANS 10400 XA 2021. The top-performing office building is Khayelitsha SSC, with an A rating for its consumption of only 19kWh/m².

The WCG is committed to meeting the current deadline of 7 December 2025 for obtaining EPCs for the first three categories of buildings covered in the National Energy Act regulations.

