Western Cape Government

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Property Efficiency Report 2022/23

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

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About the report

When the Western Cape Government (WCG) Property Efficiency Report (PER) was first published in 2013, it analysed performance data from the 2011/12 period within a selected building portfolio study sample. The PER aimed to become the benchmark public sector building performance report. We continue this endeavour in this 12th edition of the PER, which covers the reporting period April 2022 to March 2023.

In the 11th edition, we broadened the scope of the reporting office portfolio to include all office buildings larger than 500m² and portfolios of health and education facilities. We are delighted to announce the further expansion in this 12th edition of an electricity and water efficiency analysis for a more extensive selection of properties. The number of health facilities in the sample has increased from 12 to 22, and the number of education facilities from 19 to 45. Whenever possible, we have compiled data spanning at least four years for every property within the current scope of the PER. In addition, data obtained from the Energy Performance Certification (EPC) process has also been incorporated into this report.

The current edition of the PER underscores the WCG's continued dedication, through the Department of Infrastructure (DOI) as the custodian of the WCG's immovable assets, to maintaining transparency in its management and operations and in the use of data to support the management of available resources. The information presented here is derived from data contributed by various DOI components, the occupants of the different properties, and other stakeholders.

The portfolio of immovable assets discussed in this report comprises a diverse range of buildings situated both in the Cape Town Central Business District (CBD), and various non-CBD locations throughout the Western Cape. Similarly, the health and education facilities considered in the scope of this 12th PER are distributed across various regions of the province.

Reporting period and scope

This report examines the performance of 37 owned and leased office buildings with useable space larger than 500m², 22 health facilities and 45 education facilities from the WCG's portfolio in the 2022/23 period.

Changes from the previous report include:

The removal of 8 Riebeeck Street (Norton Rose House) from the study sample because the lease has expired and the facility is no longer occupied by the WCG;

The exclusion of Wynberg Social Services from the study sample due to significant refurbishments being undertaken at the building during the reporting period;

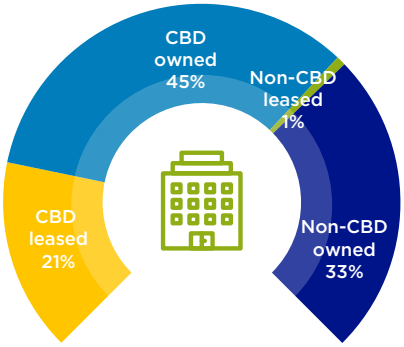
The exclusion of 68 Orange Street from the study sample because it was used only as a storage facility during the reporting period, without any on-site permanent staff; and

The increase in the number of health and education facilities portfolio covered in the study to 22 and 45 respectively.

Office portfolio

37 office buildings = **196 853m²**

- **29** owned buildings
  - **17** non-CBD — 62 531m²
  - **10** CBD — 86 971m²
  - **2** EXCLUDED — 5 392m²
- **8** leased buildings
  - **2** non-CBD — 2 087m²
  - **6** CBD — 39 872m²



Office portfolio percentage split based on useable m²

Health portfolio

22 health facilities = **774 530m²**

- **9** clinics — 3 909m²
- **13** hospitals — 770 621m²

Education portfolio

45 education facilities = 294 946m²

15 high schools
124 768m²

30 primary schools
170 178m²

Data management and access

Accurate data plays a crucial role in making informed decisions within any organisation or business. To establish a reliable baseline, we gather primary data from various stakeholders, meticulously cross-checking for precision.

Every meter reading is compared to the consumption details provided in various municipal accounts. Any discrepancies are promptly investigated and rectified. The gathered information undergoes rigorous analysis using sound methodologies to ensure accurate interpretation.

We use the Green Building Council of South Africa (GBCSA) office building database to benchmark the WCG's office portfolio. Public and private sector landlords utilise the GBCSA's energy and water benchmarking tool to assess their buildings' performance compared to similar structures in the same geographic area and within their own property portfolios. Our private sector cost benchmark is derived from multiple sources, including private landlords, MSCI, the South African Property Owners' Association (SAPOA), and other publicly available reports and indexes.

Furthermore, we have consistently benchmarked our energy efficiency performance against a selection of City of Cape Town (CCT) office buildings as part of our ongoing efforts to ensure optimal performance.

Foreword

TERTUIS SIMMERS

Provincial Minister of Infrastructure

This is the 12th edition of the publication of this important annual report by the Provincial Public Works Branch on the performance of some of its key property portfolios and is the first Property Efficiency Report published by the new Department of Infrastructure. The DOI was established on 1 April 2023 to play a lead role in coordinating infrastructure activities throughout the Western Cape. It will establish departmental capacity in certain functional areas and ensure that the ecosystem for infrastructure and infrastructure delivery is coordinated and impactful for the benefit of all the province's citizens.

The United Nations Sustainable Development Goals (SDGs) is a set of 17 interconnected global goals designed to address various social, economic, and environmental challenges facing the world. The SDGs, which aim to achieve a more sustainable and equitable future for all by 2030, are crucial for the entire world and therefore hold significant importance for regions like the Western Cape. By extension, they are significant for regional governments such as the Western Cape Government and specifically for the DOI.

> *The vision of the Western Cape Infrastructure Framework 2050 (WCIF) is to enable infrastructure-led growth and investment for the province that will benefit the communities we serve in five areas: social, energy, economic, technological, and ecological infrastructure.*

The aim is to contribute to economic growth and jobs; to maximise the economic and social benefits of infrastructure projects; to crowd in infrastructure investment and co-investment from the private sector; to align to existing plans and structures in the public sector and the private sector; and to demonstrate innovation, futures planning, and an integrated approach to infrastructure growth.

As citizens of the Western Cape, we must embrace our role as stewards of the environment and recognise our greater role in the province and the country to responsibly tackle our social, economic, and environmental challenges. So too, in our position as the custodians of provincial infrastructure. Sustainable infrastructure development has a significant impact on both the environment and on society more broadly. Thus, by integrating the principles of sustainable development into infrastructure planning, we can minimise negative environmental impacts, promote social inclusion, and support economic growth that benefits all citizens. Our properties and infrastructure play a significant role in shaping the sustainability of our region, and it is, therefore, essential that we manage our assets efficiently and minimise our ecological footprint while providing quality services to our citizens.

The impact of global climate change is undeniable. Rising temperatures, and the extreme weather events we recently experienced as well as dwindling resources demand our attention. In South Africa's current energy crisis, the Branch: Provincial Public Works within DOI is taking steps to reduce our

carbon emissions, conserve energy, and implement sustainable practices in our property portfolio. By doing so, we will mitigate the impact of climate change and the energy crisis and demonstrate our commitment to the well-being of our community.

In this edition of the Property Efficiency Report, we examine the current performance of some of our property portfolios to enable us to identify the need for, as well as the opportunities, to manage performance improvements and enhance efficiency. We highlight the importance of integrating sustainable practices, adopting technology, and fostering collaboration. By embracing these principles, we can unlock the full potential of our properties while minimising environmental impact and maximising the value we deliver to our citizens.

> *Thus, by integrating the principles of sustainable development into infrastructure planning, we can minimise negative environmental impacts, promote social inclusion, and support economic growth that benefits all citizens.*

Introduction

JACQUI GOOCH
Head: Department of Infrastructure

The “age of scarcity” refers to a historical period characterised by limited resources, economic challenges, and a lack of opportunities for development and progress. This term is often used to describe certain eras in the past when societies faced constraints due to various factors such as population growth, limited technological advancements, resource depletion, and geopolitical conflicts.

By contrast, the current era is often referred to as the “age of opportunity” or the “knowledge age”. This period is marked by significant advancements in science, technology, communication

and globalisation, leading to an abundance of opportunities and potential for growth. Due to our financial and resource constraints, population pressures, technological limitations, economic struggles and environmental challenges, we in South Africa often feel that we are still in an age of scarcity. However, I am a long-time advocate of the view that we are very much in an age of opportunity.

Despite the very real "scarcity" in our land, I very much believe that we can harness the culture of entrepreneurship and innovation that we have in this country (and which is very evident in my department) to foster a culture of creativity and problem-solving that drives economic growth and social progress. We have an abundance of natural resources and advanced information and technological resources, we are globally and locally connected, and there are massive advancements globally in education, healthcare and social services. The opportunity that I see is to bring this abundance to bear in the Western Cape through the work of the Department of Infrastructure to improve the living standards and overall well-being of our citizens. After all, the citizens (including all civil servants contributing to this endeavour both as officials and as citizens) are at the centre of it.

In the 12th edition of the Western Cape Government Property Efficiency Report, we find ourselves at a crossroads, facing both the challenges of an age of scarcity and the boundless opportunities of an age of opportunity.

> *"The greatest threat to our planet is the belief that someone else will save it."*
>
> *Robert Swan*

Since it began in 2012, our Property Efficiency Report journey has been characterised by our unyielding commitment to enhancing property performance while simultaneously embracing the transformative potential of technology integration, whole asset life cycle management, and evidence-based decision-making. The need for efficient and effective property management has never been greater. The limited availability of resources, both financial and natural, necessitates more prudent allocation and utilisation of government assets.

As we forge ahead, we recognise that managing property efficiency is not limited to isolated interventions; rather it is characterised by a holistic and integrated approach. Whole asset life cycle management underpins our strategy, ensuring that every aspect of asset management, from design and construction to operation and decommissioning, is orchestrated with precision and forethought.

In the age of opportunity, technology has become an indispensable partner in our pursuit of property efficiency. From smart building systems that optimise energy consumption to cutting-edge asset management platforms, technology has revolutionised how we interact with our assets throughout their life cycle. Embracing technology has not just been a means to modernise

our practices, it demonstrates our commitment to building a sustainable and resilient future for generations to come.

Our efforts are always guided by a commitment to evidence-based decision-making. As has been emphasised on many occasions, the original rationale for a publication such as this was, and remains, the measurement of data, the monitoring of the performance, and the management of the opportunities that emerge from that. In other words, evidence-based decision-making. As data and information become increasingly accessible, we equip ourselves with the knowledge needed to make sound judgements, foster innovation, and continuously improve our property efficiency endeavours.

We continue on our developmental journey – one that confronts the challenges of scarcity and seizes the opportunities of the age of possibility. Smart governance, the power of technology, whole asset life cycle management, and evidence-based decision-making are the beacons that illuminate our path towards a more efficient, sustainable, and equitable future. As we navigate these waters, we do so with a steadfast commitment to serving our communities, nurturing our environment, and building a legacy of excellence in public sector property efficiency for the benefit of future generations.

Executive summary

Building performance highlights

	2021/22						2022/23					
	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
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 11th edition of the PER, the cost/FTE was based on calculating an arithmetic mean (sum of all observations)/(number of observations). For this 12th 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 11th edition.

Report highlights

12th **This 12th edition of the Property Efficiency Report covers the 2022/23 period.**

37 **The report examines the performance of 37 selected office buildings from the Western Cape Government's immovable asset portfolio.**

- The WCG has received its first set of energy performance certificates.
- The sum of the office space included in the study sample portfolio is 191 461m . 68 Orange (1 368m) was excluded from the sample because it is currently used for storage without on-site permanent staff. 8 Riebeeck Street (Norton Rose House) was removed from the study sample because the lease has expired and it is no longer occupied by the WCG. Wynberg Social Services (4 024m²) has been excluded due to significant refurbishments being undertaken during the reporting period.
- The WCG remains committed to enhancing the efficiency of its owned buildings, as well as modernising facilities within those buildings.

Additions to the study sample portfolio

- Health facilities: the study sample was expanded from 12 to 22 – 9 clinics and 13 hospitals.
- Educational facilities: the study sample was expanded from 19 to 45 – 15 high schools and 30 primary schools.
- In future editions of the PER, we plan to further increase the size of the study sample.

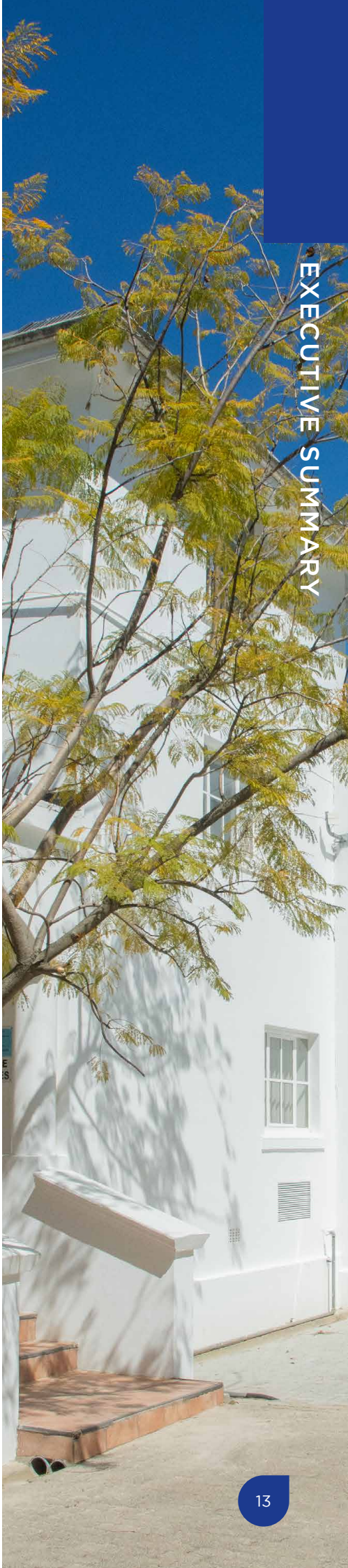
Office buildings

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%.

- 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.
- Private sector benchmark performance increased substantially from 216kWh/m²/pa in 2021/22 to 240kWh/m²/pa in 2022/23.
- The CCT office building portfolio electricity consumption benchmark showed an increase of 2% over the reporting period.
- The CCT's office portfolio electricity consumption is 93kWh/m²/pa, outperforming the WCG portfolio by approximately 17.7%.
- The owned buildings' consumption of 107kWh/m²/pa is 21.3% better than the leased buildings' consumption of 136kWh/m²/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 CBD portfolio electricity consumption increased by 11.1% from 117kWh/m²/pa in 2021/22 to 130kWh/m²/pa in 2022/23.

The portfolio continues to outperform the private sector benchmark of 0.73kL/m²/pa for the same period.

- 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%.
- CBD owned buildings are the star water performers of the portfolio. The consumption of CBD owned buildings, recorded at 0.47kL/m²/pa, outperforms that of leased buildings (0.75kL/m²/pa) – a substantial difference of 37.3%.
- 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.



Health facilities

Electricity consumption

- 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%.

Water consumption

- Clinics have experienced a decline in water consumption efficiency, with consumption increasing from 0.89kL/m²/pa to 1.13kL/m²/pa – an increase of 26.9% over the reporting period.
- 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 facilities

Electricity consumption

- High schools' efficiency improved from 22kWh/m²/pa to 18kWh/m²/pa, marking an impressive improvement of 18.2% over the reporting period.
- In the case of primary schools, electricity consumption has decreased to 13kWh/m²/pa from 15kWh/m²/pa in 2021/22, reflecting a noteworthy 13.3% performance improvement.
- Primary schools have reached the same level of efficiency as in 2019/20.

Water consumption

- 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/m²/pa in 2021/22 to 0.49kL/m²/pa in 2022/23, making them the top performers in this area.

Space utilisation

The All buildings portfolio showed an employee density improvement from 25m²/FTE in 2021/22 to 20m²/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.
- The CBD leased buildings are the most efficient in terms of space utilisation in the WCG portfolio, with an impressive reduction from 16m²/desk to 14m²/desk, an improvement of 12.5%.
- CBD leased buildings outperformed the CBD-owned buildings (22m²/desk) by 36.4%.
- The average desk space in Non-CBD buildings was 17m²/desk.
- Space utilisation in Non-CBD owned properties decreased from 20m²/desk to 17m²/desk, an efficiency improvement of 15%.
- The combined employee density of CBD buildings decreased by almost 24%, from 25m²/FTE to 19m²/FTE.
- The employee density in CBD leased buildings also improved, decreasing by 23.8% from 21m²/FTE to 16m²/FTE.

- CBD owned properties displayed a similar improvement trend of 25%, moving from 28m²/FTE in 2021/22 to 21m²/FTE in 2022/23.
- Non-CBD premises reduced space per person to 20m²/FTE, and both owned and leased premises followed a similar trend.

Occupancy cost

The WCG study portfolio's cost of occupying office space has decreased by 8.8%, from R3 108/m² in 2021/22 to R2 833/m² in 2022/23.

- The private sector occupancy costs benchmark increased by 6% from R2 178/m² to R2 309/m² over the reporting period.
- Capital costs decreased by just over R390/m²/pa (59.8%) over the reporting period.
- Overall, all office building costs/m² decreased by R275/m² (8.8%) over the 2022/23 reporting period.
- The cost per square metre of all owned office buildings decreased from R2 938/m² in 2021/22 to R2 566/m² in 2022/23, making them the most cost-effective part of the study sample portfolio.
- Leased buildings saw an increase in costs, rising from R3 651/m² in 2021/22 to R3 687/m² in 2022/23, which is an approximate increase of 1%.
- The cost of all CBD properties fell from R3 321/m² in 2021/22 to R3 032/m² in 2022/23, a decrease of 8.7%.
- The cost of CBD owned properties decreased by 13.9% from R3 129 to R2 692 over the reporting period.
- Non-CBD combined properties saw a decrease in costs from R2 673/m² in 2021/22 to R2 429/m² in 2022/23.
- Non-CBD owned property costs decreased by 10.5% over the reporting period, from R2 671/m² to R2 390/m², mainly due to cost savings across the portfolio and capital projects finalised in the 2021/22 reporting period.
- Non-CBD leased premises showed an increase of 31.5% in costs from R2 740/m² to R3 603/m² due to scheduled maintenance costs incurred at Oudtshoorn Shared Services Centre (SSC).

Chapter 1:

Environmental performance

In this 12th edition of the Property Efficiency Report, we continue to expand the portfolio of buildings in our study sample. In the previous edition, the portion of the WCG office portfolio under study was significantly different to the sample covered in the first ten reports in the series. We adjusted the inclusion criterion to spaces larger than 500m², a departure from the previous 1 000m² threshold. To align with the report's requirements, we excluded certain vacated leased buildings and others that no longer serve as office spaces, and currently have no staff currently assigned to them.

Building upon our inclusion in the study of electricity and water efficiency in education and health facilities from the previous year, we have considerably expanded the number of health and education facilities in the study sample. The number of education facilities in the current PER has increased from 19 to 45, and the number of health facilities from 12 to 22. In addition, we have incorporated a new dataset spanning the past four years for each newly included property.

This marks an exciting milestone, and we eagerly anticipate further expansions and enhancements in future editions of the report.

Prioritising efficient planning and responsible utilisation of natural resources is crucial for the sustainable development and well-being of our society and the planet. It involves careful management,

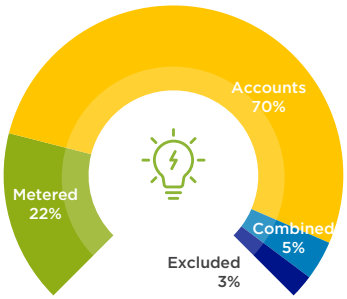
conservation, and consideration of the long-term consequences of resource use. This approach is essential for environmental sustainability, economic stability, and the well-being of current and future generations.

Efficiently strategising and making the most of our natural resources continues to be our top priority. The extension of the national statutory deadline for the compulsory submission and display of energy performance certificates (EPCs) to 7 December 2025 means we have enough time to ensure that we are fully compliant with the EPC regulations by the deadline.

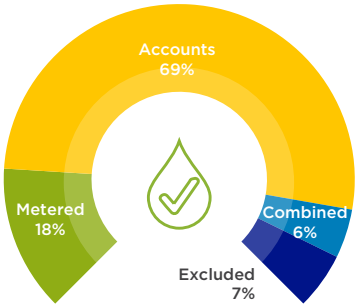
We are delighted to share that we have successfully appointed four inspection bodies to assist us to obtain approximately 1 200 EPCs over the next three years.

Office buildings

The WCG employs a combination of municipal and Eskom account usage data and remote meters to compile data on **electricity consumption**. Seventy per cent of the data originates from monthly municipal and Eskom accounts received from multiple institutions, while 22% is obtained from our internal energy consumption meters. A total of 5% of the data is derived from both metered data and municipal and Eskom accounts. Approximately 3% of the portfolio data has been excluded from the analysis due to ongoing construction and modernisation projects being undertaken in specific buildings in the study sample.



Office energy consumption data compilation per m²



Office water consumption data compilation per m²

A total of 69% of **water consumption** data in the study sample is drawn from monthly municipal accounts, while 18% is sourced directly from metered data. Excluded facilities account for 7%, and the balance of 6% is derived from a combination of metered data and municipal accounts.

The reasons why approximately 7% of the portfolio was excluded from the analysis included certain leased buildings not billing water separately, ongoing modernisation projects, or unresolved discrepancies in municipal accounts.

Electricity benchmarks										
Types of buildings	kWh/m²/pa		kWh/m²/pa		kWh/m²/pa		kWh/m²/pa		kWh/m²/pa	
	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector
	2018/19		2019/20		2020/21		2021/22		2022/23	
CBD leased	177	231	172	215	111	218	136	213	139	245
CBD owned	146	233	157	226	102	214	108	213	126	227
CBD all buildings	166	232	161	222	105	216	117	213	130	234
Non-CBD leased	64	240	67	219	56	219	93	219	85	231
Non-CBD owned	105	233	92	226	66	214	82	213	81	227
Non-CBD all buildings	103	230	91	225	65	226	82	218	81	245
All leased	168	233	164	216	106	218	134	214	136	241
All owned	139	230	132	226	87	220	97	216	107	240
All buildings	146	231	138	223	91	221	106	216	113	240

The annual electricity consumption (kWh) per square metre per annum (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. However, it is worth noting that the current performance falls below the private sector benchmarks for the years 2021/22 and 2022/23, which stand at 216kWh/m²/pa and 240kWh/m²/pa respectively.

Water benchmarks										
Types of buildings	kL/m²/pa		kL/m²/pa		kL/m²/pa		kL/m²/pa		kL/m²/pa	
	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector	WCG portfolio	Private sector
	2018/19		2019/20		2020/21		2021/22		2022/23	
CBD leased	0.86	0.64	0.88	0.68	0.52	0.42	0.80	0.61	0.75	0.82
CBD owned	0.45	0.47	0.44	0.59	0.37	0.52	0.44	0.56	0.47	0.64
CBD all buildings	0.56	0.51	0.55	0.59	0.41	0.45	0.55	0.60	0.55	0.70
Non-CBD leased	0.99	0.95	0.87	0.84	0.66	0.64	1.36	1.20	1.11	1.18
Non-CBD owned	0.80	0.69	0.55	0.66	0.40	0.36	0.50	0.61	0.63	0.70
Non-CBD all buildings	0.81	0.70	0.57	0.68	0.41	0.39	0.53	0.69	0.65	0.75
All leased	0.87	0.72	0.88	0.72	0.54	0.48	0.83	0.81	0.77	0.93
All owned	0.56	0.59	0.48	0.63	0.38	0.43	0.46	0.59	0.53	0.68
All buildings	0.63	0.59	0.56	0.63	0.41	0.43	0.54	0.65	0.58	0.73

Water consumption increased by 7.4% from the previous period and now stands at 0.58kL/m²/pa. The private sector benchmark increased from 0.65kL/m²/pa to 0.73kL/m²/pa, an increase of 12.3%.

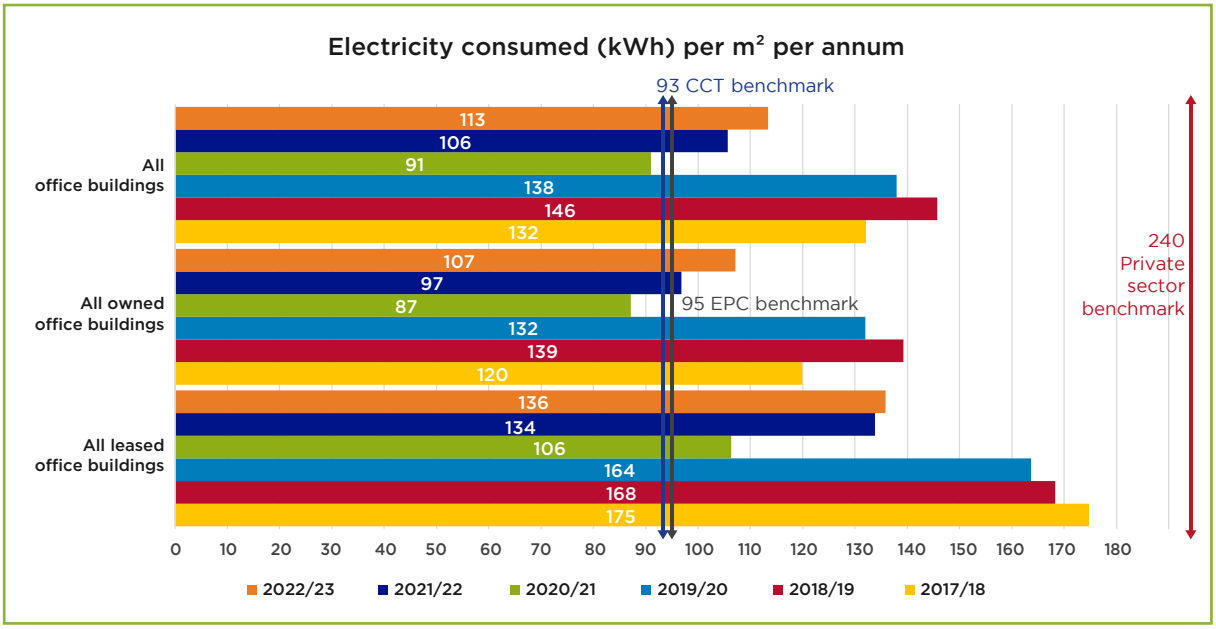
Electricity

Electricity consumption increased by 6.6% over the last year, from 106kWh/m²/pa in 2021/22 to 113kWh/m²/pa in 2022/23. As more staff members return to the office, consumption levels are trending back towards pre-COVID-19 levels. At 113kWh/m²/pa in 2022/23, electricity consumption is 18.1% lower than the 2019/20 levels of 138kWh/m²/pa.

The WCG portfolio outperformed the private sector electricity consumption benchmark. The private sector benchmark increased by 11.1% from 216kWh/m²/pa in 2021/22 to 240kWh/m²/pa in 2022/23. This indicates that consumption levels in the broader private sector are rising as more staff return to the office throughout South Africa.

The City of Cape Town's office building study portfolio benchmark, reflecting the performance of 32 buildings, also showed an increase of 2% over the reporting period. The CCT's office portfolio electricity consumption is 93kWh/m²/pa, which outperformed the WCG portfolio in 2022/23 by approximately 17.7%.

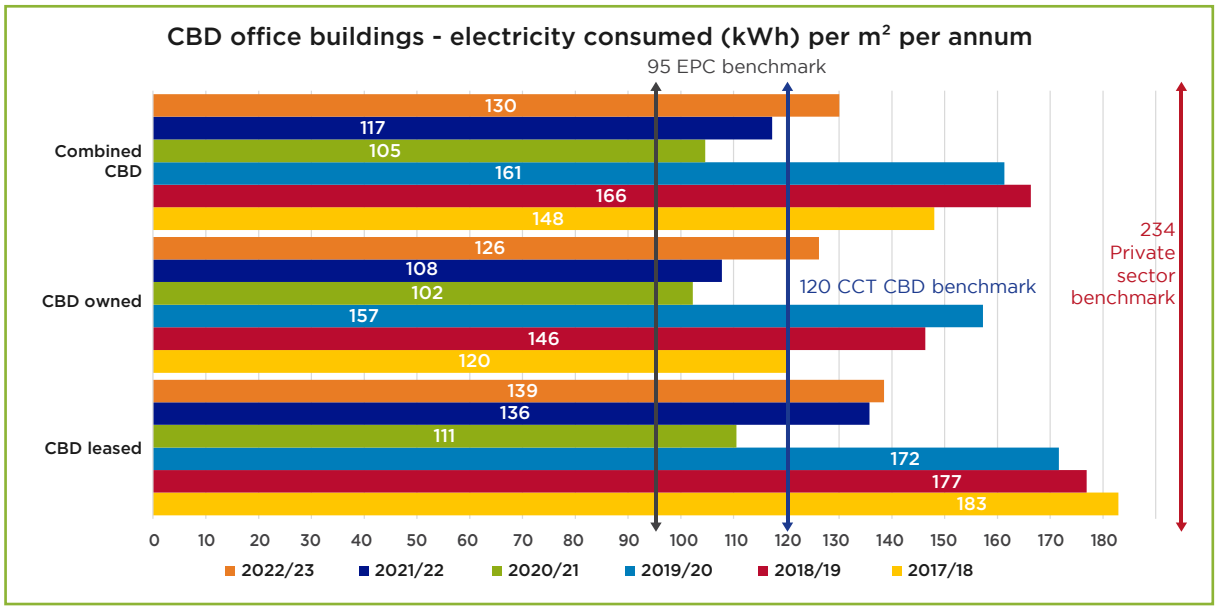
When compared to the EPC benchmark for Climate Zone 4 (as explained in the Glossary), which remains at 95kWh/m²/pa for G1 Offices, the EPC benchmark performance outperformed that of the WCG by 15.9%.



The WCG-owned buildings portfolio consumption of 107kWh/m²/pa was 21.3% more efficient in 2022/23 than the portfolio of leased buildings at 136kWh/m²/pa.

Over the reporting period, consumption in owned buildings portfolio increased by 10.3% from 97kWh/m²/pa to 107kWh/m²/pa. The leased buildings portfolio's consumption increased from 134kWh/m²/pa to 136kWh/m²/pa, an increase of 1.5% compared to the previous reporting period.

CBD electricity

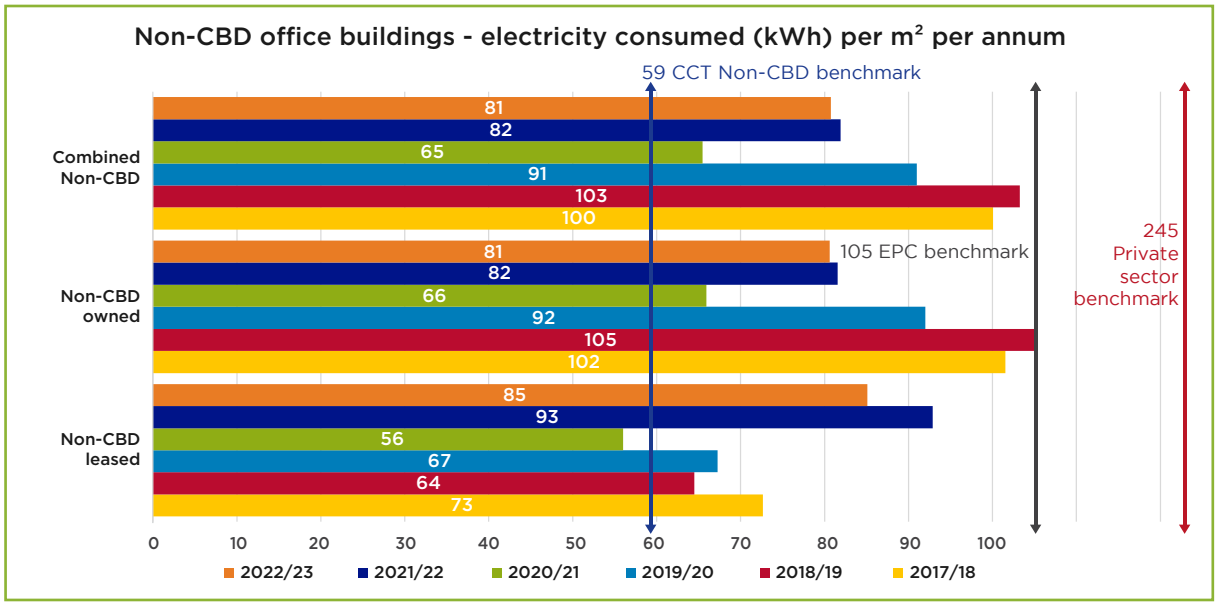


The CBD portfolio's electricity consumption increased by 11.1% from 117kWh/m²/pa in 2021/22 to 130kWh/m²/pa in 2022/23. CBD WCG-owned buildings (126kWh/m²/pa) outperformed the CDB leased portfolio (139kWh/m²/pa) by 9.4% over the reporting period. The CBD owned buildings portfolio had the biggest increase in electricity consumption at 16.7%, up from 108kWh/m²/pa to 126kWh/m²/pa.

The CBD portfolio (130kWh/m²/pa) outperformed the private sector benchmark (234kWh/m²/pa) by more than 44.4%. The private sector benchmark increased 9.9% over the reporting period from 213kWh/m²/pa in 2021/22 to 234kWh/m²/pa in 2022/23.

The CCT CBD portfolio benchmark (120kWh/m²/pa) outperformed the WCG CBD portfolio by 7.7% (130kWh/m²/pa). The combined CBD CCT benchmark of 120kWh/m²/pa increased by 5.3% from 114kWh/m²/pa in 2021/22.

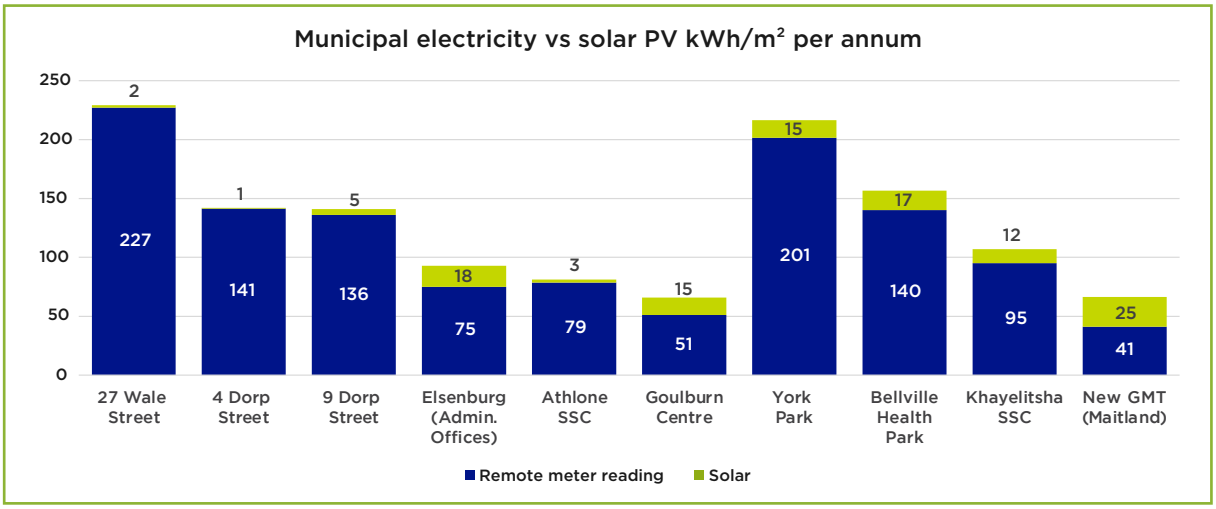
Non-CBD electricity



Electricity consumption in non-CBD owned buildings decreased over the reporting period by 1.2% from 82kWh/m²/pa to 81kWh/m²/pa. Non-CBD owned buildings (81kWh/m²/pa) outperformed non-CBD leased buildings (85kWh/m²/pa) by 4.7%.

The non-CBD buildings portfolio outperformed both the private sector benchmark of 245kWh/m²/pa and the EPC benchmark of 105kWh/m²/pa. The CCT non-CBD buildings benchmark is 59kWh/m²/pa, making CCT buildings 27.2% more efficient than the WCG combined non-CBD buildings portfolio at 81kWh/m²/pa.

Energy consumption – solar photovoltaic and municipal electricity consumption

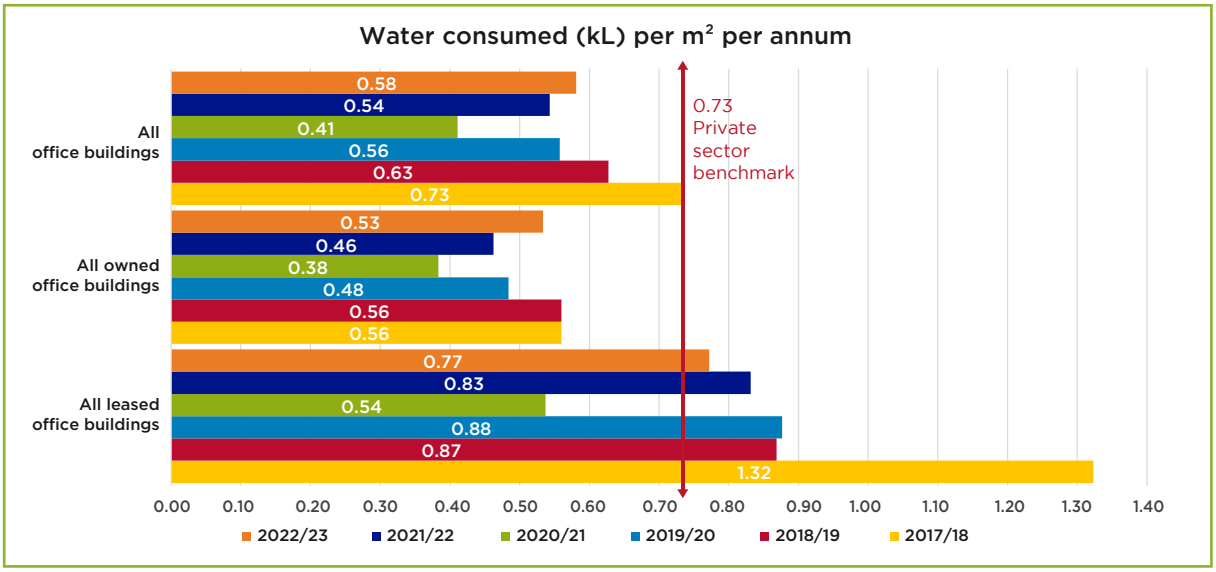


The buildings that produce the largest proportion of their electricity from solar sources are the new Government Motor Transport building in Maitland at 38.3%, Goulburn Centre at 22.4%, and Elsenburg (Admin. Offices) at 19.3%.

Water

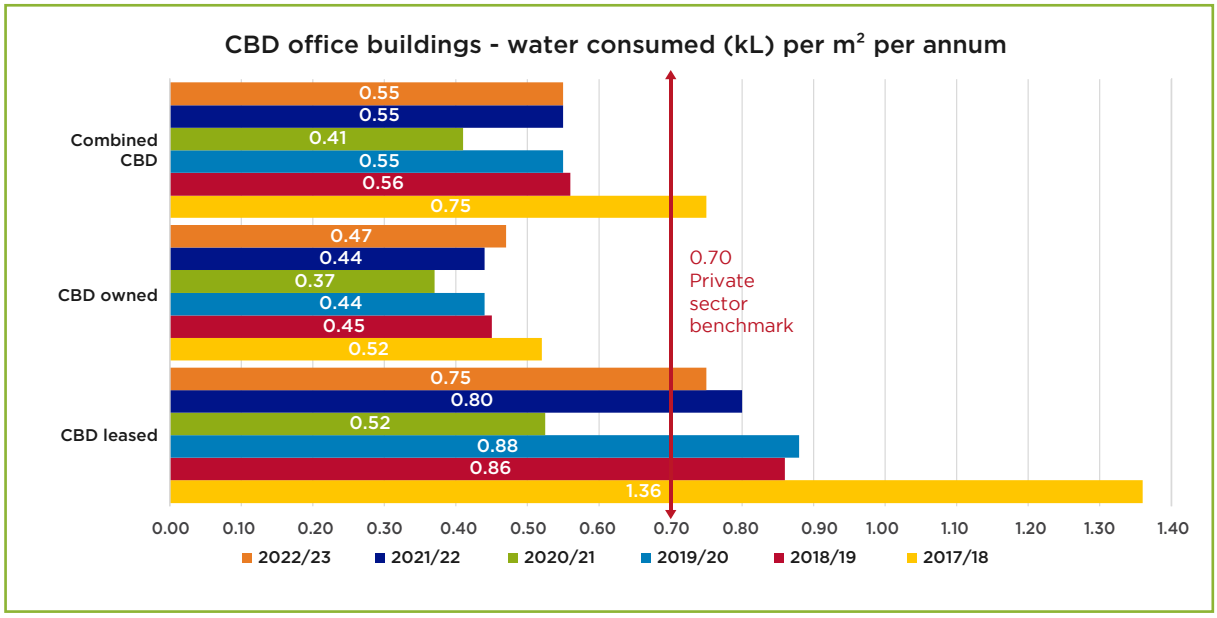
Water consumption during the 2022/23 reporting period increased from 0.54kL/m²/pa to 0.58kL/m²/pa, a 7.4% year-on-year increase. The portfolio continues to outperform the private sector benchmark of 0.73kL/m²/pa for the same period. The private sector benchmark surged by 12.3% during the reporting period, rising from 0.65kL/m²/pa to 0.73kL/m²/pa.

The water consumption performance of owned buildings, at 0.53kL/m²/pa, surpasses that of leased buildings, which stands at 0.77kL/m²/pa, by a noteworthy 31.2%.



Over the reporting period, consumption in the leased buildings portfolio decreased by 7.2% from 0.83kL/m²/pa to 0.77kL/m²/pa.

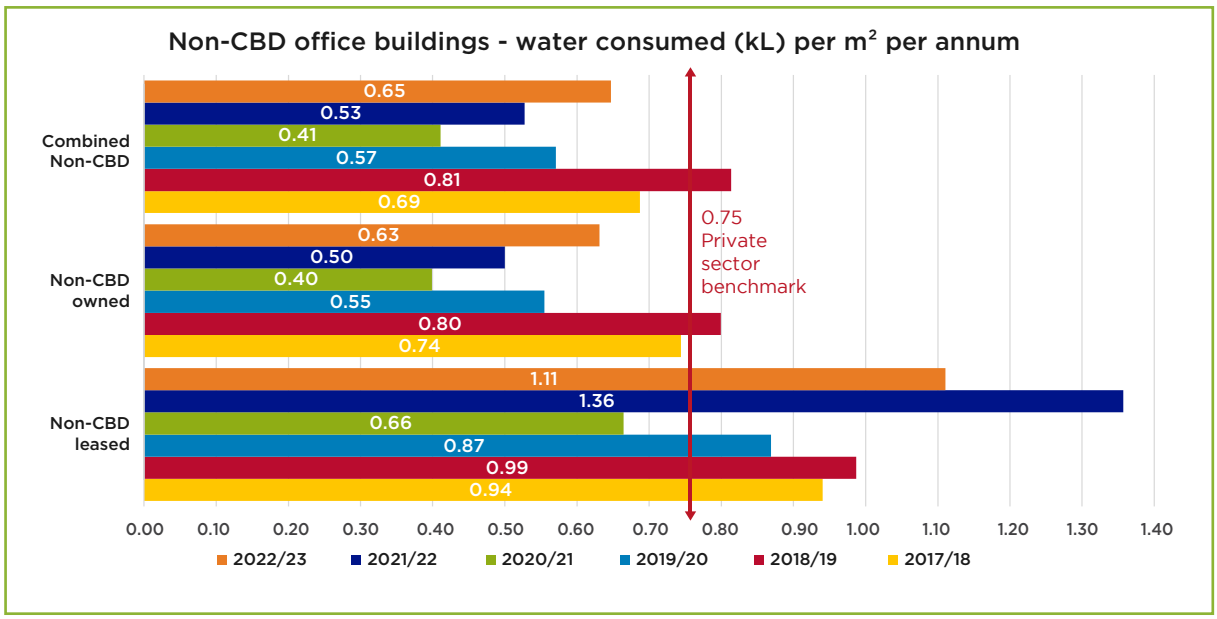
CBD water



During the reporting period, the CBD buildings collectively remained stable with a consumption rate of 0.55kL/m²/pa. Notably, the CBD buildings portfolio outperformed the private sector benchmark of 0.70kL/m²/pa by 21.4%.

The CBD owned buildings portfolio is the star water performer of all the portfolios. The consumption in CBD owned buildings, recorded at 0.47kL/m²/pa, outshines the performance of the leased buildings portfolio (0.75kL/m²/pa), by a substantial margin of 37.3%.

Non-CBD water



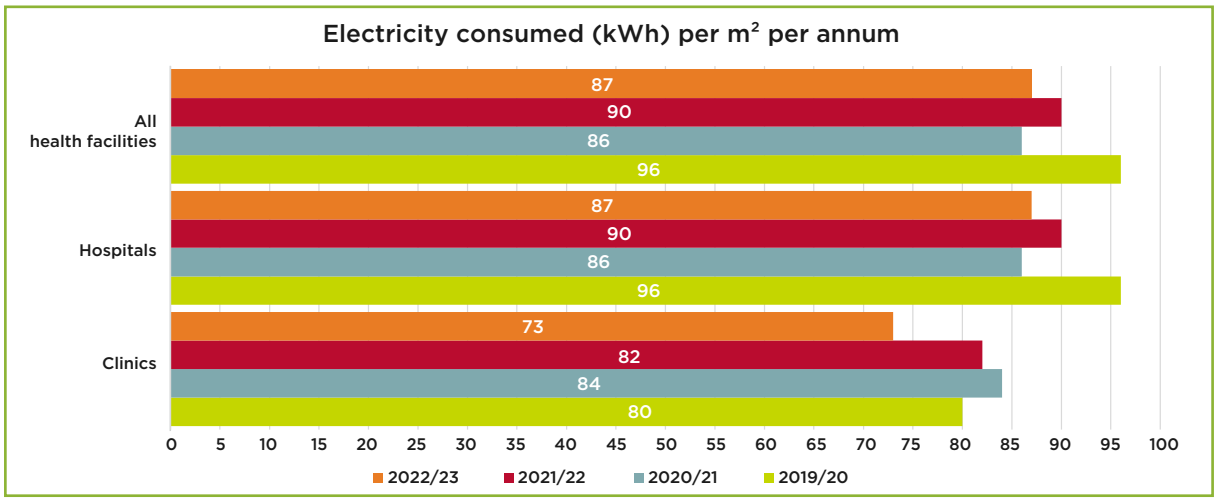
The performance of the non-CBD owned buildings portfolio during the reporting period (0.63 kL/m²/pa) is notably better than the industry benchmark of 0.75kL/m²/pa. In addition, the non-CBD leased building portfolio demonstrated a significant reduction in consumption of 18.4% throughout the reporting period, from 1.36kL/m²/pa to 1.11kL/m²/pa.

Health facilities

This year, we have expanded the scope of our environmental performance chapter by incorporating ten more health facilities, raising the total number of health facilities to 22. This group comprises 13 hospitals, varying in size from 2 300m² to approximately 365 210m², as well as nine clinics ranging from 150m² to 730m². We have meticulously included four years of data for each facility, with the intention of progressively expanding the size of this portfolio in coming years. This initiative represents a significant stride forward in the Western Cape Government's ongoing commitment to greater transparency and comprehensive performance reporting.

As a result of the expanded sample size, we have re-evaluated the data for the past four years to establish a new annual benchmark figure. We consider this to be a more accurate representation of the updated dataset.

Health facilities' electricity consumption

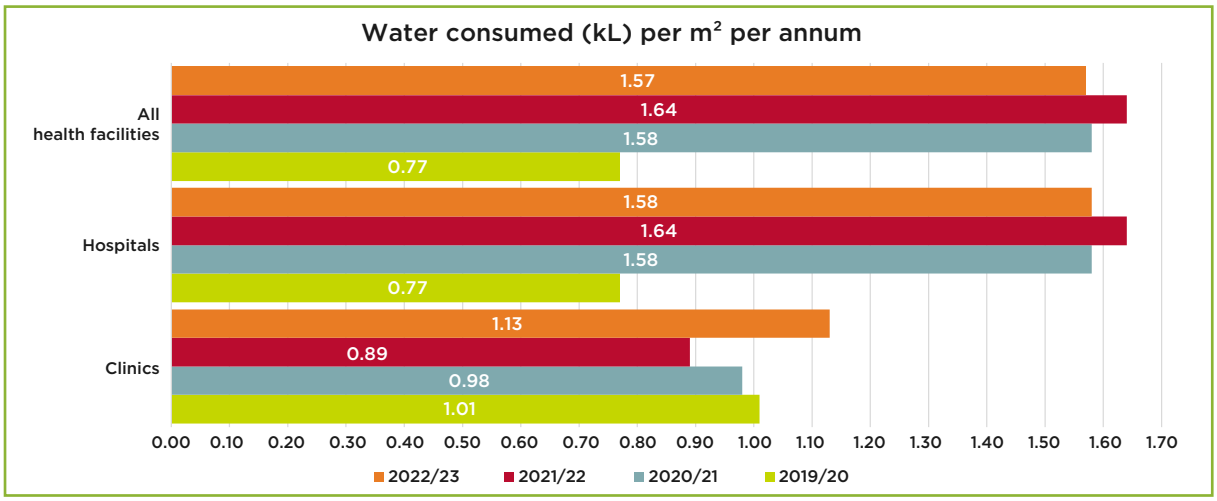


During the reporting period, all health facilities have demonstrated improvements in efficiency, with energy consumption decreasing from 90kWh/m²/pa to 87kWh/m²/pa, marking an overall improvement of 3.3%. Clinics have reduced their consumption from 82kWh/m²/pa to 73kWh/m²/pa – an impressive improvement of 10.9%. Hospitals have also shown better efficiency, with a 3.3% improvement.

Health facilities' water consumption

Clinics have experienced a decline in water use efficiency, with consumption increasing from 0.89kL/m²/pa to 1.13kL/m²/pa – an increase of 26.9% over the reporting period.

Meanwhile, at 1.58kL/m²/pa, the hospital portfolio consumption levels are almost back to where they were in 2020/21. The water use efficiency of all health facilities improved from 1.64kL/m²/pa in 2021/22 to 1.57kL/m²/pa in 2022/23.

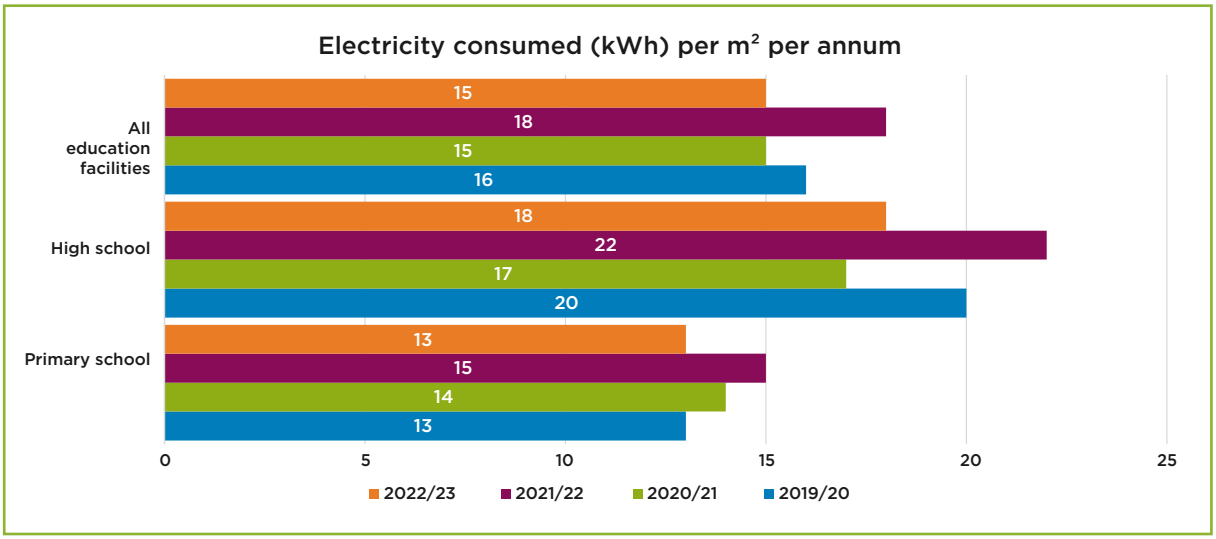



GEEN
DEURGANG

Education facilities

In the current edition of the PER, we have expanded our education facilities study sample to 45 – 30 primary schools and 15 high schools. Facility sizes range from 1 180m² to 32 692m². These facilities are situated across the Western Cape.

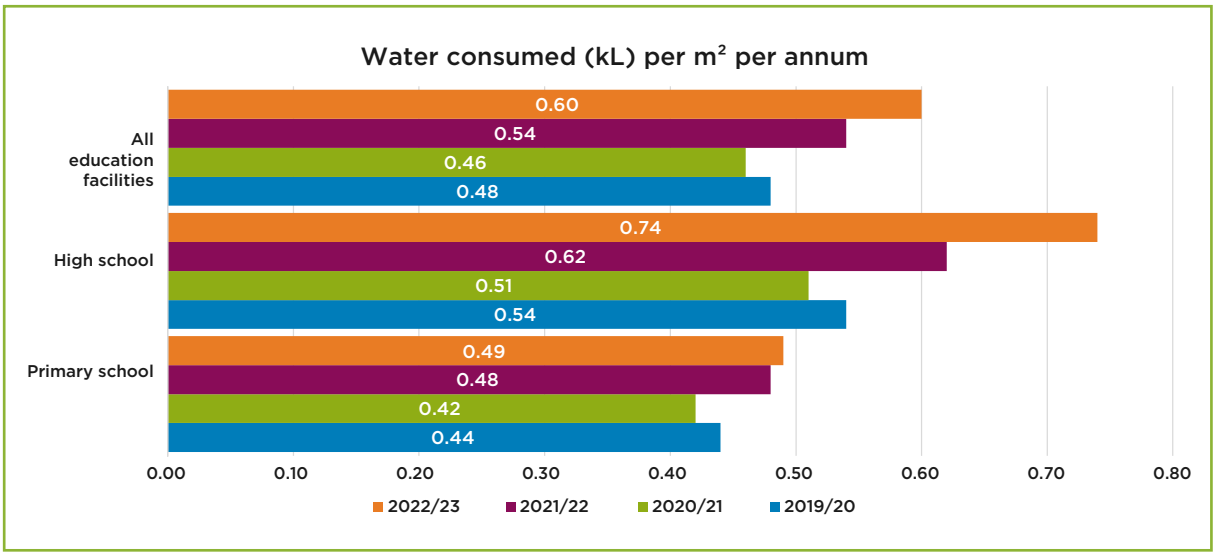
Education facilities' electricity consumption



The total education facilities portfolio has demonstrated improved efficiency in this reporting period. The most notable improvement was observed in high schools, where efficiency increased from 22kWh/m²/pa to 18kWh/m²/pa, marking an impressive improvement of 18.2% from the previous reporting period.

In primary schools in the study sample, electricity consumption decreased to 13kWh/m²/pa from 15kWh/m²/pa in 2021/22, reflecting a noteworthy 13.3% improvement. Primary schools have now reached the same level of efficiency as was observed in 2019/20.

Education facilities' water consumption



Water consumption for all education buildings has increased during the reporting period. High schools have seen a significant increase in water consumption, with a performance of 0.74kL/m²/pa, up from 0.62kL/m²/pa. This indicates a 19.4% decrease in efficiency. Meanwhile, primary schools have maintained a consistent and impressive performance, with water consumption showing only a slight increase from 0.48kL/m²/pa in 2021/22 to 0.49kL/m²/pa in 2022/23, making them the top performers in this category.


SDC10-Box 5 (5.12kWh)
shoto

Case study: Rooftop solar photovoltaic (PV) systems

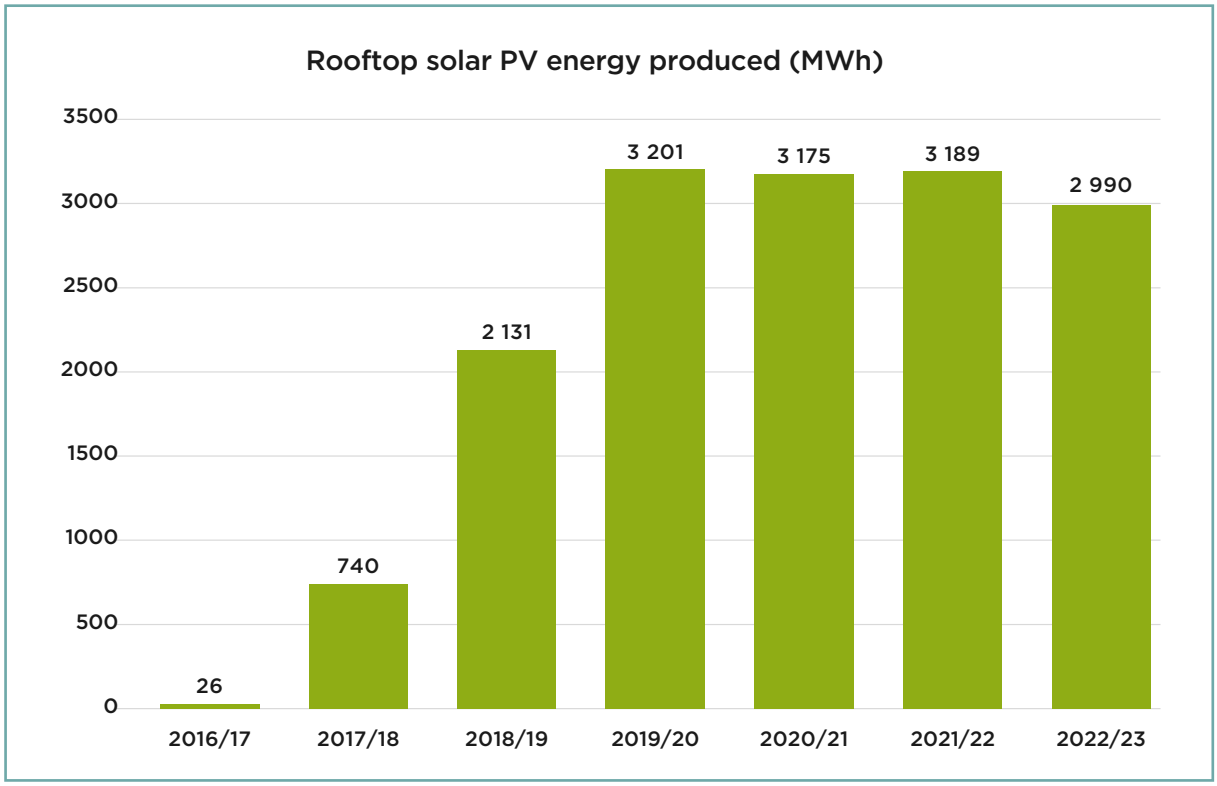
As the custodian of the Western Cape Government's immovable assets, the Department of Infrastructure continually strives to include more renewable energy solutions in its public buildings, thereby decreasing its dependence on Eskom electricity and freeing up electricity for other users. Due to favourable climatic conditions, South Africa has one of the strongest solar renewable energy resources in the world. The WCG is continuing to harness this resource through continuing to instal solar PV systems in its rooftop solar energy programme.

The current energy production from WCG solar PV systems during the financial year 2022/23 is 2 990MWh.

Rooftop solar PV - capacity and energy produced (MWh)											
Project/ building	Capacity (kWp)	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	Movement	Change in generation of energy	Grand Total
9 Dorp Street	52	9	74	61	9	11	74	73	↓	-1,11	312
Athlone SSC	109	15	164	177	172	175	170	27	↓	-143,00	899
27 Wale Street	16	2	24	23	23	23	22	23	↑	0,27	140
Alfred Street: Library & Cape Medical Depot	285	0	197	465	440	344	242	443	↑	201,18	2 130
Bellville Health Park	75	0	195	125	122	122	120	110	↓	-10,78	793
Khayelitsha SSC	21	0	24	25	34	31	30	31	↑	1,51	175
GMT Maitland	72	0	45	108	94	124	105	100	↓	-4,48	576
Goulburn Centre	22	0	17	36	25	1	36	33	↓	-3,50	149
Cape Teaching and Learning Institute (CTLI)	425	0	0	449	719	732	733	719	↓	-13,32	3 353
Kromme Rhee	131	0	0	185	222	221	222	161	↓	-60,66	1 010
Gene Louw	54	0	0	69	84	85	79	75	↓	-4,62	393
Elsenburg (Admin. Offices)	367	0	0	376	615	611	630	458	↓	-171,80	2 691
Dassen Island	15	0	0	3	7	10	9	10	↑	0,62	39
4 Dorp Street	29	0	0	15	37	43	44	13	↓	-31,01	151
York Park	120	0	0	15	154	108	148	118	↓	-29,94	541
Artscape Building	430	0	0	0	444	489	461	532	↑	71,08	1 926
Mossel Bay - Summer Heights	40	0	0	0	0	45	65	66	↑	0,69	176
	2 262	26	740	2 131	3 201	3 175	3 189	2 990	↓	-199	15 452

The solar energy yield from our systems has increased significantly from 26MWh in 2016/17 to 2 990MWh in 2022/23. However, there was a slight decrease in capacity and renewable energy produced, which is attributed to the following:

- 4 Dorp Street's solar panels were damaged due to inclement weather which resulted in the solar PV system having to be removed; and
- The solar PV system at Athlone SSC was removed for two months to enable significant roof repair work to be done.

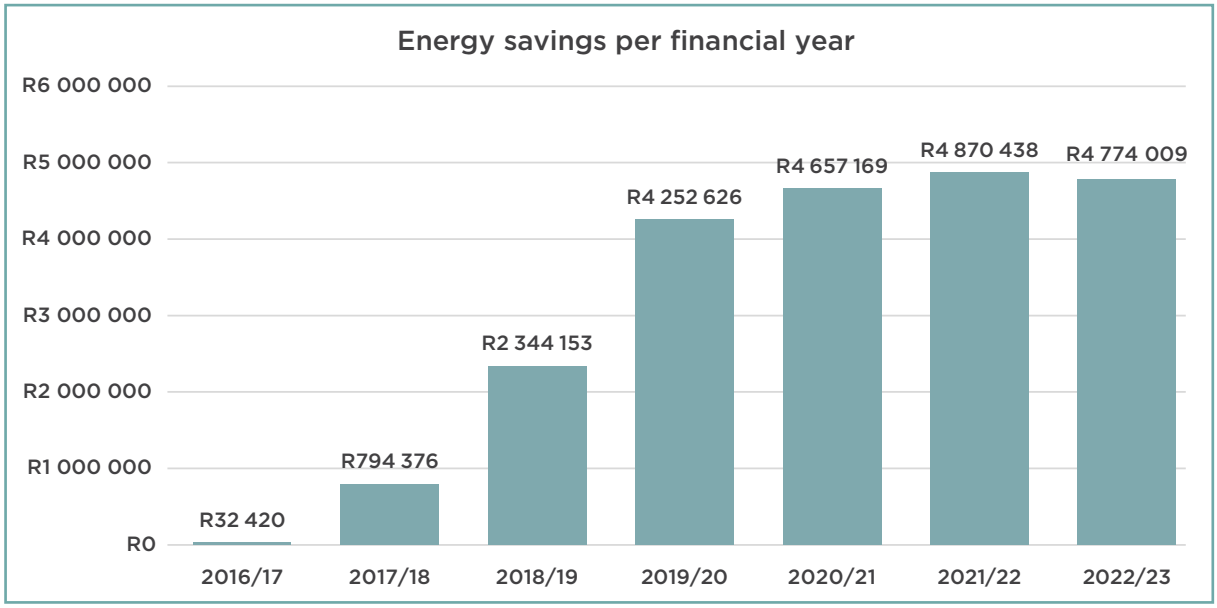


Of the buildings analysed in this case study, 71% are situated outside the Cape Town CBD, and the balance are located in the CBD.

Rooftop solar PV - capacity and cost savings per financial year											
Project/ building	Capacity (kWp)	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	Movement	Change in generation of energy	Grand Total
9 Dorp Street	52	R12 047	R108 497	R103 855	R15 265	R19 391	R163 797	R143 637	↓	-R20 160	R566 490
Athlone SSC	109	R16 884	R179 888	R221 276	R250 141	R262 720	R283 088	R19 645	↓	-R263 444	R1 233 641
27 Wale Street	16	R3 488	R35 935	R39 268	R44 528	R45 270	R50 594	R54 016	↑	R3 422	R273 100
Alfred Street: Library & Cape Medical Depot	285	R0	R191 145	R511 790	R564 626	R512 738	R343 190	R632 926	↑	R289 737	R2 756 416
Bellville Health Park	75	R0	R187 320	R180 346	R203 755	R194 131	R232 507	R235 485	↑	R2 979	R1 233 544
Khayelitsha SSC	21	R0	R32 535	R38 854	R64 052	R325 398	R64 156	R60 763	↓	-R3 392	R585 758
GMT Maitland	72	R0	R45 953	R125 543	R159 717	R205 225	R183 005	R223 515	↑	R40 510	R942 959
Goulburn Centre	22	R0	R13 103	R50 785	R47 895	R0	R73 364	R68 683	↓	-R4 680	R253 830
Cape Teaching and Learning Institute (CTLI)	425	R0	R0	R409 640	R939 481	R999 435	R1 094 799	R1 146 287	↑	R51 488	R4 589 642
Kromme Rhee	131	R0	R0	R160 881	R255 145	R258 823	R264 650	R211 412	↓	-R53 238	R1 150 911
Gene Louw	54	R0	R0	R68 129	R104 282	R108 523	R108 915	R122 469	↑	R13 554	R512 318
Elsenburg (Admin. Offices)	367	R0	R0	R354 289	R707 743	R716 569	R874 240	R644 728	↓	-R229 513	R3 297 569
Dassen Island	15	R0	R0	R27 450	R72 221	R103 196	R105 750	R108 900	↑	R3 150	R417 517
4 Dorp Street	29	R0	R0	R22 717	R63 775	R77 955	R87 983	R18 447	↓	-R69 536	R270 876
York Park	120	R0	R0	R29 330	R201 500	R143 620	R197 886	R187 395	↓	-R10 491	R759 731
Artscape Building	430	R0	R0	R0	R558 500	R629 496	R655 161	R801 222	↑	R146 060	R2 644 379
Mossel Bay - Summer Heights	40	R0	R0	R0	R0	R54 679	R87 353	R94 478	↑	R7 125	R236 510
	2 222	R32 420	R794 376	R2 344 153	R4 252 626	R4 657 169	R4 870 438	R4 774 009	↓	-R96 430	R21 725 191

The cost savings from these systems has increased from R32 420 in 2016/17 to R4 870 438 in 2021/22, with a total saving of R21 725 191 over the full reporting period. In 2022/23, there was a 2% decrease in cost savings due to the abovementioned storm damage and roof maintenance.

The Alfred Street: Library & Cape Medical Depot and the Artscape Complex both returned to full capacity during the year, with the associated contribution to cost savings.



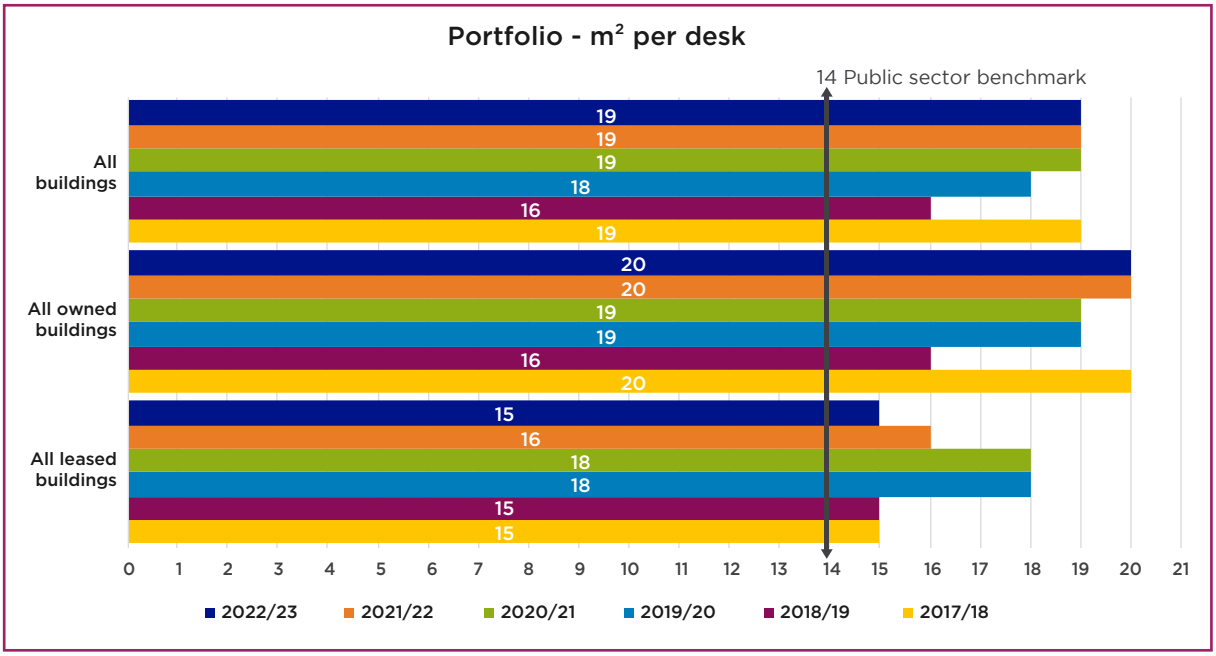
Chapter 2
Space utilisation

The WCG is committed to improving the use of space in its properties, which can result in significant cost savings and better quality office spaces. This effort helps to create a productive work environment for the administration of the provincial government. Employment density is a metric used to measure the average floor area in square metres (m^2) allocated to each full-time employee, providing insight into how space is utilised in the workplace.

The world of work has significantly shifted in the past three years as many companies embrace remote work. This trend shows no sign of slowing down, and the WCG departments continue to apply their policy of enabling employees to work remotely.

During the reporting period, overall space efficiency remained stable.

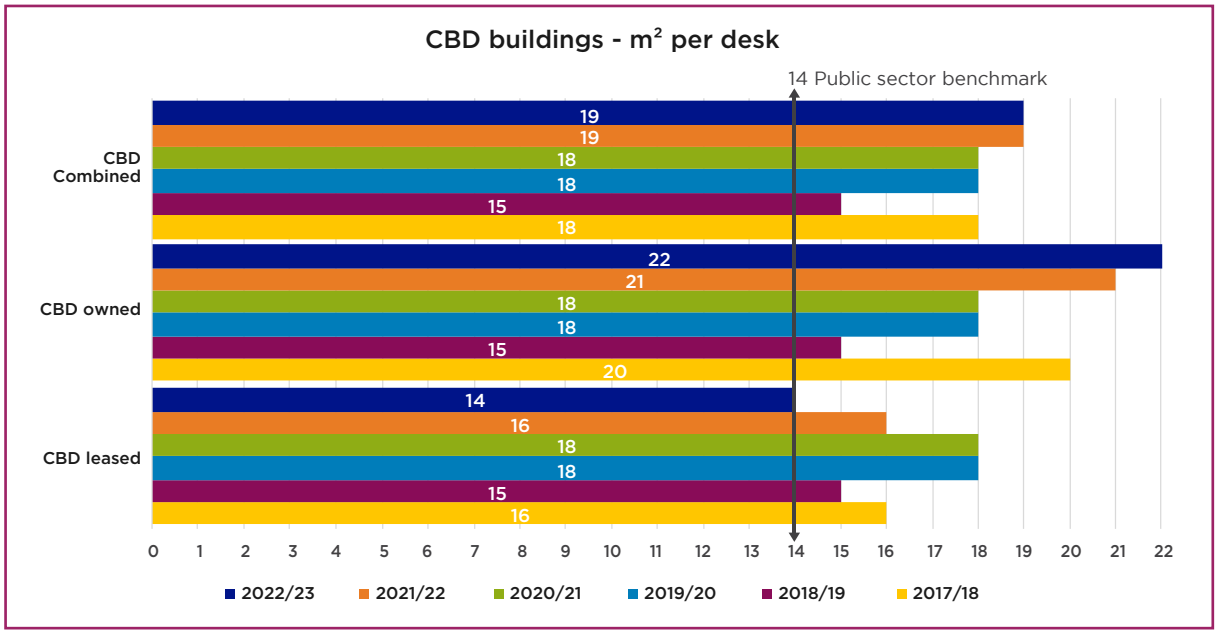
Square metre per desk



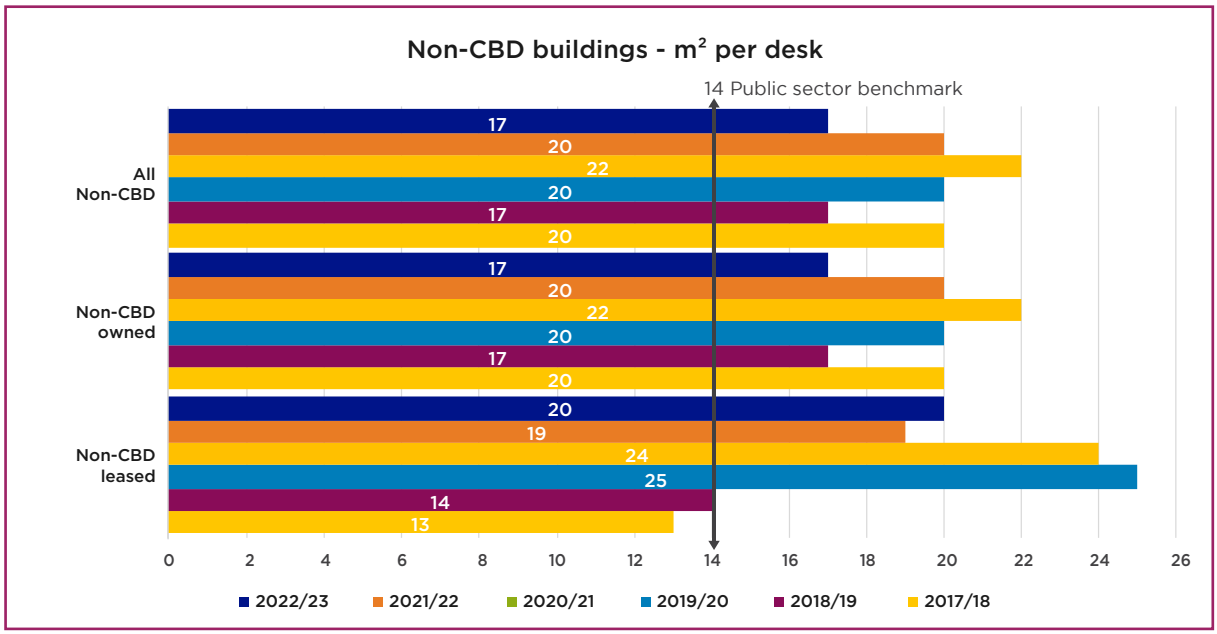
The portfolio has had an average desk space of 19m²/desk in the past three years. According to reports on space utilisation norms for the public sector released by iOffice and Zippia in the United States, the WCG portfolio is 35.7% less efficient than the benchmark of 14m²/desk per desk.

CBD buildings

The buildings leased in the CBD are the most efficient in terms of space utilisation in the overall WCG office portfolio, with an impressive reduction from 16m²/desk to 14m²/desk, an improvement of 12.5%. In fact, this portfolio outperformed the CBD-owned buildings (22m²/desk) by 36.4%. The primary factor contributing to these favourable outcomes is the efficiency of 1 North Wharf Square, with 10m²/desk in 2021/22 and 11m²/desk in 2022/23.



Non-CBD buildings

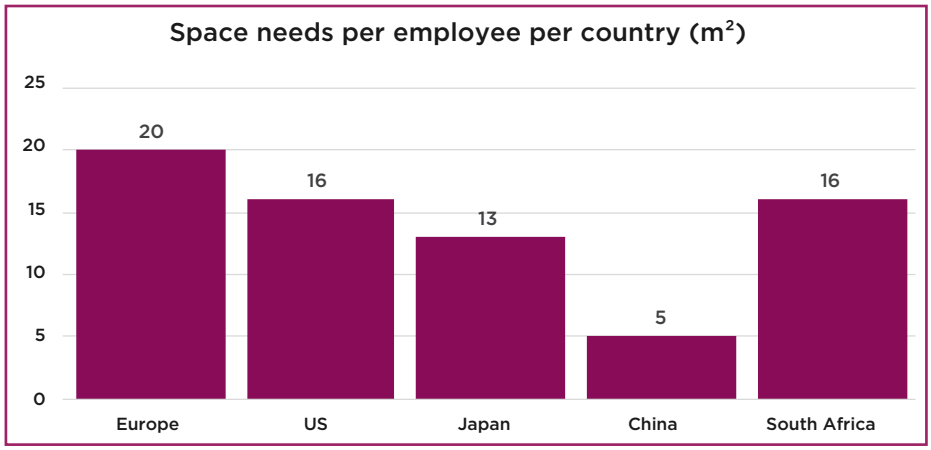


Non-CBD buildings had an average space utilisation of 17m²/desk. The Non-CBD leased properties portfolio had a decrease in efficiency from 20m²/desk, a decline of 5.3% compared to the 19m²/desk achieved in 2021/22. Additionally, the space utilisation of Non-CBD owned properties decreased from 20m² per desk to 17m² per desk, an improvement in space efficiency of 15%.

Square metre per full time equivalent

Office space requirements per employee vary globally. On average, the space each full-time equivalent needs is 14m². European countries require the most space at 20m², while China requires the least at 5m². The US and South Africa have the same space requirements per employee, which is 16m² per sector.

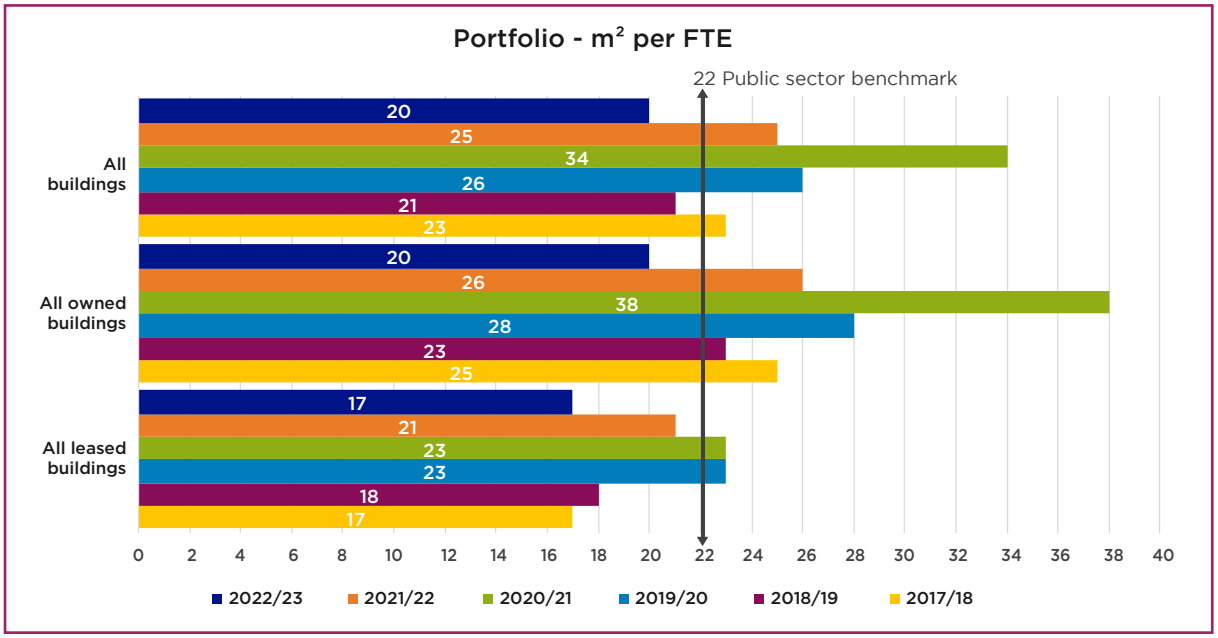
United States: office space per employee per sector (m²)	
Categories	**Mean**
Technology	14
Real estate	17
Communication	24
IT	25
Insurance	26
Built environment	26
Financial	23
Federal Government	29
Legal	38
Law enforcement	22
Social services	22



The necessary office area per employee can fluctuate based on multiple factors, including location, density, age, and cost. As per iOffice and Zippia data, diverse sectors in the United States demand distinct amounts of space. The Legal category, followed by Federal Government, required the most space, with an estimated range of 38m² to 29m².

m² per FTE	Low-density	Average density	High-density
Low	7	14	23
High	14	23	46
Average	11	19	35

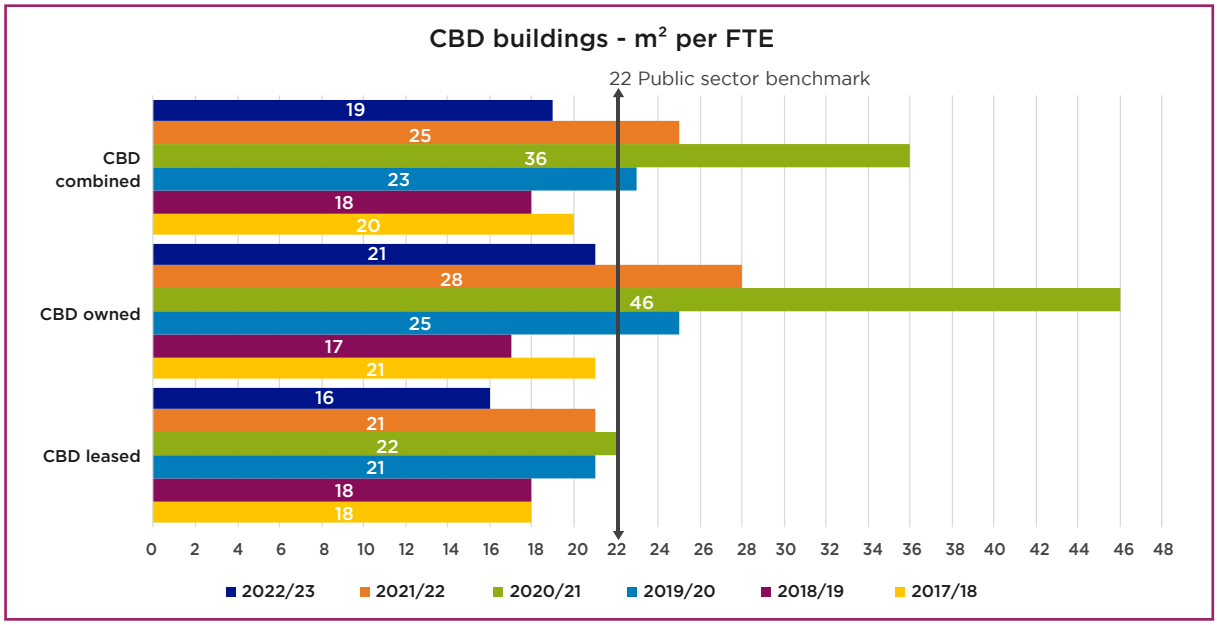
WCG is a moderate to high-density user; our benchmarking figure remains stable at 22m², which is aligned with the United States benchmark for Law enforcement and Social services.



The portfolio showed an employee density improvement from 25m²/FTE in 2021/22 to 20m²/FTE in 2022/23, an improvement in space utilisation of 20%. All leased buildings are the star performer at 17m²/FTE, down from 21m²/FTE over the same reporting period last year.

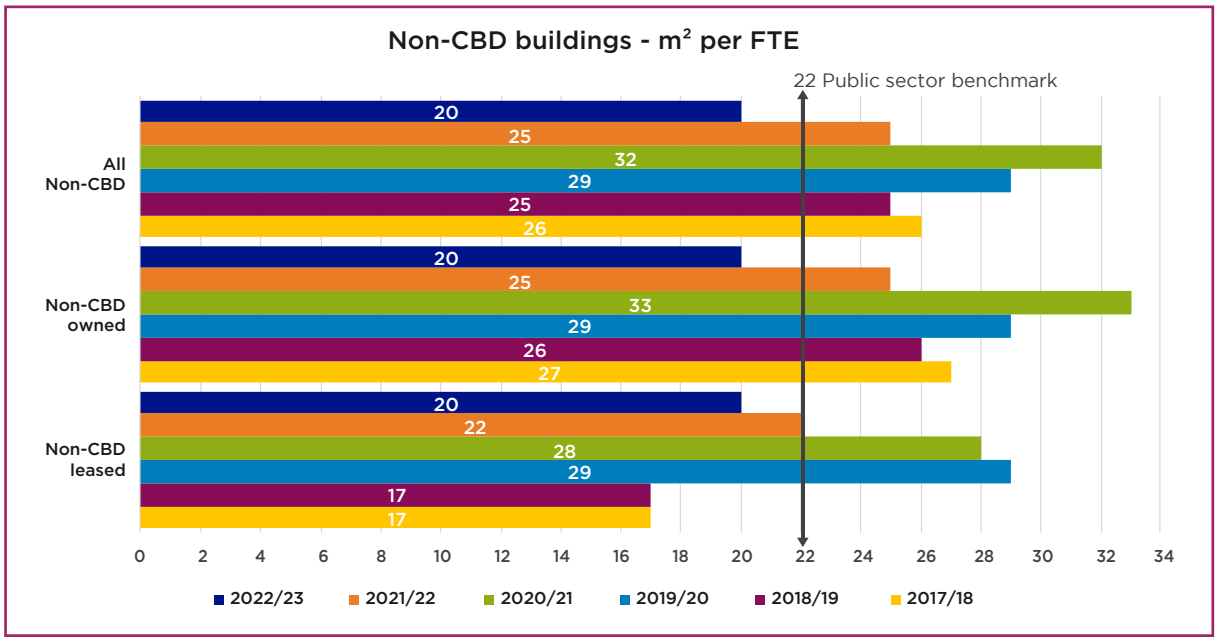
CBD buildings

During the reporting period, there was an improvement in the employee density of all buildings in the CBD. The combined employee density of CBD buildings decreased by almost 24%, from 25m²/FTE to 19m²/FTE. Similarly, the employee density in CBD leased buildings also improved, decreasing by 23.8% from 21m²/FTE to 16m²/FTE.



CBD owned properties displayed a similar improvement trend of 25% moving from 28m²/FTE in 2021/22 to 21m²/FTE in 2022/23.

Non-CBD buildings



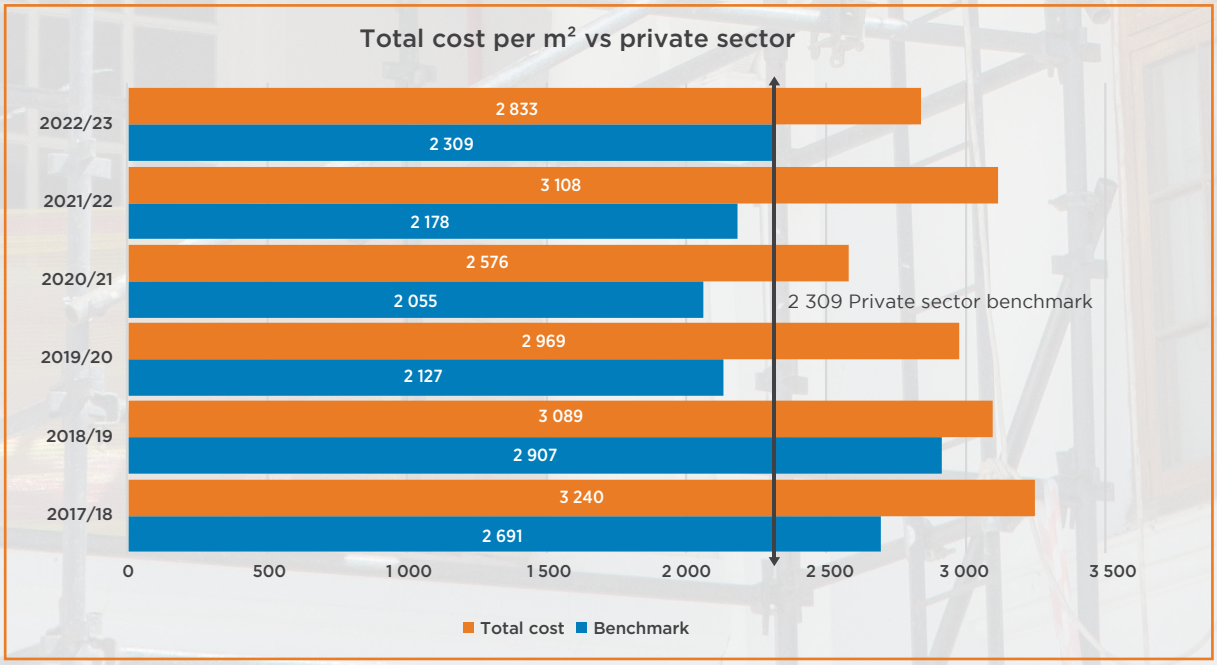
Non-CBD premises reduced space per person to 20m²/FTE, and both owned and leased premises displayed a similar trend.

Chapter 3

Performance measurement cost

According to research conducted by Serendipityremix, the private sector benchmark for performance management costs has increased by 6% from R2 178/m² to R2 309/m² over the reporting period. The demand and investment interest for new projects, including construction, maintenance and redevelopment, continues to increase, leading to new projects and refurbishments of existing premises.

The WCG recognises the importance of ongoing investment in its portfolio, but the current economic climate has had a negative impact on available budgets for infrastructure investment. The WCG study portfolio's cost of occupying office space has decreased by 8.8%, from R3 108/m² in 2021/22 to R2 833/m² in 2022/23. However, it is still 22.7% higher than the private sector benchmark.



The table below provides more detail about these cost categories.

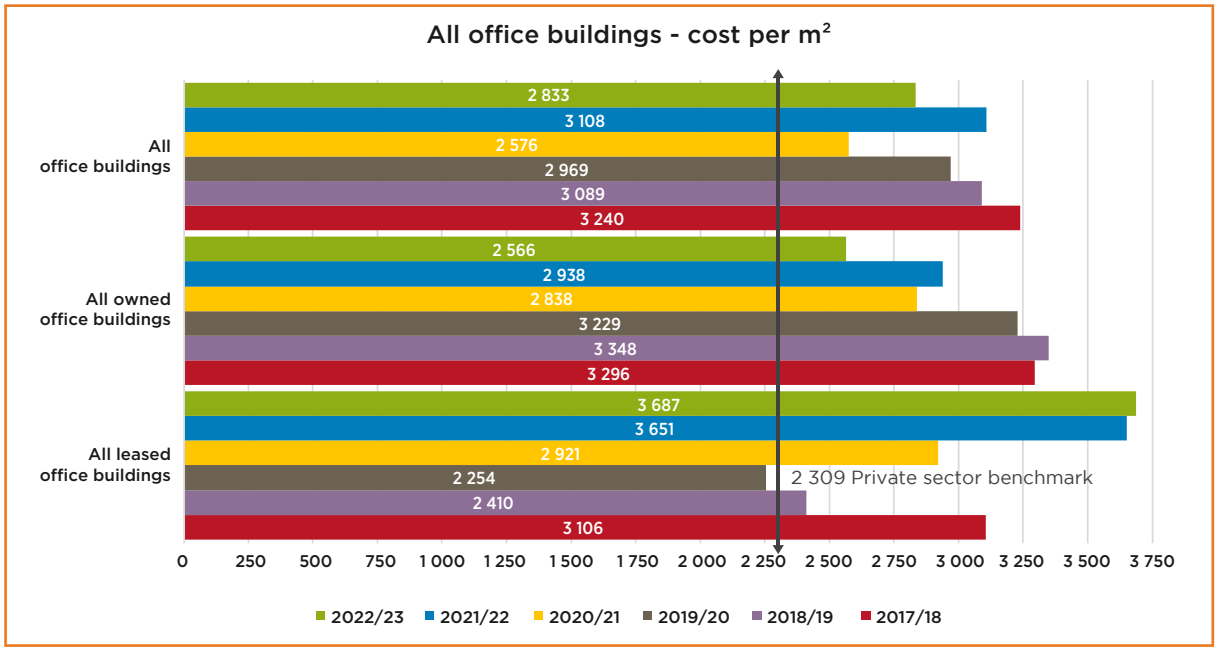
During the reporting period, there were changes in various costs related to our office buildings. Capital costs decreased by just over R390/m²/pa (59.8%), while cleaning and electricity decreased by R70/m²/pa (69.5%) and R69/m²/pa (19.3%) respectively. This reduction in capital costs is due to the completion of projects during the reporting period. The most significant increases were due to annual escalations in rentals per existing lease agreements and indicative rentals in owned properties (based on market research), which rose by just over R100/m²/pa (9.1%). Additionally, rates and taxes increased by almost R75/m² (33.6%), while scheduled maintenance increased by R61/m² (21.1%). The main scheduled maintenance projects are at the Athlone SSC facility at R4 143/m²/pa and the Khayelitsha SSC at R4 074/m²/pa. Overall, office building costs/m² decreased by R275/m² (8.8%) over the 2022/23 reporting period. The expenditure data was obtained from the occupying departments and DOI Provincial Public Works overseeing these immovable assets.

Costs per m² per annum	All owned office buildings		All leased office buildings		All			
	2021/22	2022/23	2021/22	2022/23	2021/22	2022/23	Difference R	Difference %
Rates and taxes	248	209	144	582	223	298	75	33.6%
Rent	719	978	2 491	2 099	1 142	1 246	104	9.1%
Security	112	121	147	115	121	115	-6	-4.6%
Capital projects	862	317	1	93	656	264	-392	-59.8%
Scheduled maintenance	371	434	29	83	289	350	61	21.1%
Cleaning	84	18	155	73	101	31	-70	-69.5%
Operating cost excluding soft services & municipal charges	85	103	261	267	127	142	15	12.1%
Electricity	358	271	345	336	355	286	-69	-19.3%
Water	40	55	30	20	38	46	8	22.0%
Interest on municipal accounts	2	1	2	2	2	1	-1	-34.6%
Sundries CID* levies	24	24	15	7	22	20	-2	-9.0%
Waste/refuse removal	8	8	9	7	8	7	-1	-7.4%
Other	25	28	22	2	24	26	2	8.7%
Total costs	**2 938**	**2 566**	**3 651**	**3 687**	**3 108**	**2 833**	**-275**	**-8.8%**

* CID = City Improvement District

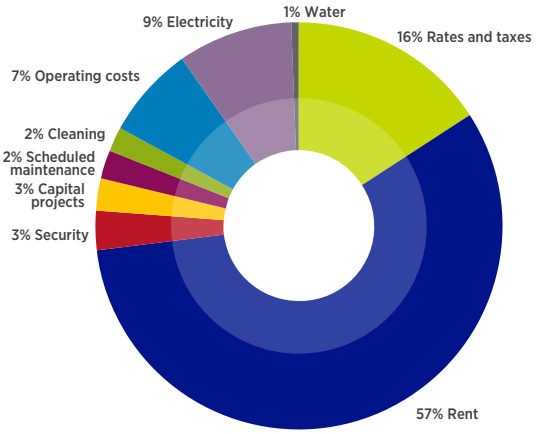
All buildings

The cost per square metre of all owned office buildings decreased from R2 938/m² in 2021/22 to R2 566/m² in 2022/23, making them the most cost-effective option. On the other hand, leased buildings saw an increase in costs, rising from R3 651/m² in 2021/22 to R3 687/m² in 2022/23, which amounts to an approximate increase of 1%.

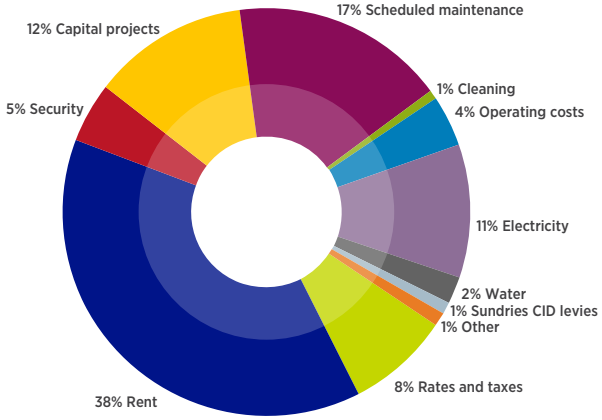


Rental costs for leased buildings make up 73% of total occupancy costs, with 57% going towards rent and 16% towards rates and taxes and City Improvement District levies. Electricity accounts for 9%,

operating costs for 7%, and security and capital projects for 3% each.



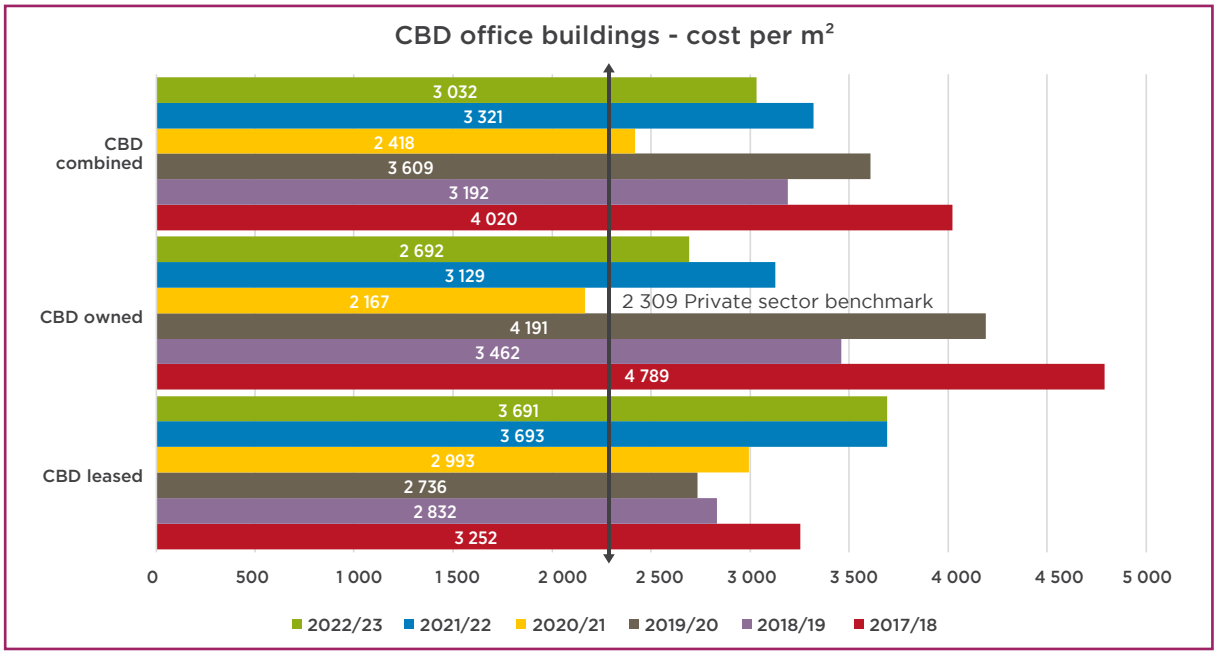
Occupancy cost breakdown
All leased buildings



Occupancy cost breakdown
All owned buildings

To compute the annualised capital expenses of owned buildings, we utilised a method similar to the one used for leased buildings. This entailed incorporating an estimated market rental rate, which allowed for a direct comparison between leased space and the private sector benchmark. Annual operating expenses comprise rates and taxes, support services, repairs, and maintenance and management fees.

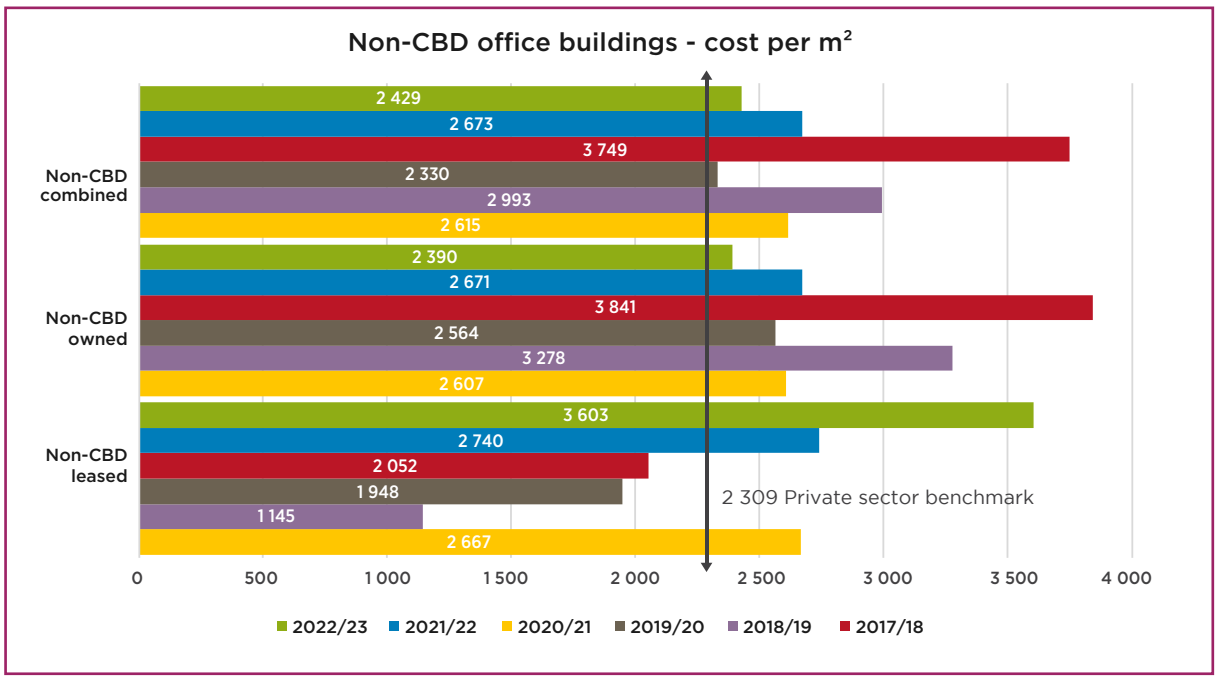
CBD office buildings



The operating costs of all CBD properties decreased from R3 321/m² in 2021/22 to R3 032/m² in 2022/23, a decrease of 8.7%. The cost of CBD owned properties decreased by 13.9% from R3 129 to R2 692 over the reporting period. The costs of CBD leased properties remained stable over the reporting period.

Non-CBD buildings

The non-CBD combined properties portfolio saw a decrease in operating costs from R2 673/m² in 2021/22 to R2 429/m² in 2022/23. Non-CBD owned property costs decreased by 10.5% over the reporting period, from R2 671/m² to R2 390/m², mainly due to cost savings across the portfolio and capital projects finalised in the 2021/22 reporting period. Non-CBD leased premises showed an increase of 31.5% in costs from R2 740/m² to R3 603/m² due to scheduled maintenance costs incurred at Oudtshoorn SSC.


Non-CBD office buildings - cost per m²
Non-CBD combined
2 429
2 673
3 749
2 330
2 993
2 615
Non-CBD owned
2 390
2 671
3 841
2 564
3 278
2 607
Non-CBD leased
3 603
2 740
2 052
1 948
1 145
2 667
2 309 Private sector benchmark
0
500
1 000
1 500
2 000
2 500
3 000
3 500
4 000
2022/23
2021/22
2020/21
2019/20
2018/19
2017/18

Chapter 4:

Portfolio overview

Portfolio by ownership 2022/23				
Ownership of office portfolio	Size m²	Count	CBD	Non-CBD
All leased	41 959	8	6	2
All owned	149 502	27	10	17
Total	191 461	35	16	19
Exclusions 2022/23	5 392	2	1	1
Total of portfolio	196 853	37	17	20

Location and ownership of office buildings	Size m² of the buildings	Number of buildings	m²/FTE
CBD leased	39 872	6	16
CBD owned	86 971	10	21
Non-CBD leased	2 087	2	20
Non-CBD owned	62 531	17	20
Total	191 461	35	20
Exclusions 2022/23	5 392	2	
Total	196 853	37	

Office building name	Useable area m² 2022/23	Total cost	Total cost per FTE	Total cost per m²	Energy 2022/23 kWh/m²/ annum	Water 2022/23 kl/m²/ annum	Number of desks per m²	m² per FTE 2022/23
All buildings	191 461	R556 591 393	R62 623	R2 833	113	0.91	19	20
All leased buildings	41 959	R173 043 477	R67 595	R3 687	136	1.57	15	17
All owned buildings	149 502	R383 547 917	R60 611	R2 566	107	0.59	20	20
All CBD buildings	126 843	R399 625 534	R73 895	R3 032	130	0.70	20	19
CBD leased	39 872	R165 523 296	R67 368	R3 691	139	0.82	14	16
11 Leeuwen Street	1 726	R4 607 291	R40 772	R2 669	97	1.20	15	13
35 Wale Street	5 309	R13 021 421	R37 743	R2 453	84	0.00	15	14
The Box (previously Atterbury House)	6 160	R23 953 461	R86 164	R3 889	157	0.67	22	21
Protea Assurance	6 608	R17 677 922	R50 364	R2 675	77	0.90	19	19
Waldorf	9 621	R47 880 949	R115 098	R4 977	129	0.38	23	17
1 North Wharf Square	10 448	R58 382 252	R61 197	R5 588	209	0.98	11	10
CBD owned	86 971	R234 102 238	R79 330	R2 692	126	0.64	24	21
1 Dorp Street	3 362	R5 980 880	R38 837	R1 779	110	0.22	22	15
3 Dorp Street	1 800	R3 508 121	R37 722	R1 949	65	1.02	19	16
4 Leeuwen Street	1 791	R2 942 193	R29 422	R1 643	64	0.29	18	13
27 Wale Street	10 844	R24 259 735	R58 457	R2 237	227	0.33	26	19
4 Dorp Street	18 365	R48 381 466	R79 184	R2 634	141	0.13	30	26
7 & 15 Wale Street	19 790	R39 599 951	R131 126	R2 001	103	0.13	66	57
9 Dorp Street	14 964	R44 576 404	R50 369	R2 979	136	0.27	17	14
Hugenot Building	2 123	R3 148 391	R54 283	R1 483	40	0.16	37	34
Union House	5 721	R10 762 613	R35 638	R1 881	95	2.91	19	16
25 Alfred Street	8 211	R50 942 485	R1 643 306	R6 204	74	0.96	265	265
All Non-CBD buildings	64 618	R156 965 859	R45 105	R2 429	81	0.75	17	20
Non-CBD leased	2 087	R7 520 181	R73 011	R3 603	85	1.18	20	20
Eersterivier Soc. Serv	865	R1 658 072	R29 089	R1 917	173	1.59	15	15
Oudtshoorn SSC	1 222	R5 862 108	R127 437	R4 797	23	0.77	27	24
Non-CBD owned	62 531	R149 445 679	R44 254	R2 390	81	0.70	17	20
Oudtshoorn WCED & DTPW	1 950	R1 304 104	R42 068	R669	29	0.03	63	57
Elsenburg (Admin. Offices)	10 804	R14 822 404	R45 890	R1 372	75	0.43	33	31
Athlone SSC	6 557	R38 221 395	R164 040	R5 829	79	0.80	28	24
Bredasdorp SSC	2 894	R1 885 502	R188 550	R652	33	0.45	289	241
Goulburn Centre	2 213	R2 720 008	R12 197	R1 229	51	0.64	10	8
Mossel Bay SSC	1 810	R1 614 106	R23 737	R892	7	0.04	27	25
Paarl WCED	2 632	R9 537 845	R89 139	R3 624	65	0.00	25	23
Swellendam SSC	1 621	R1 145 419	R21 211	R707	3	0.25	30	29
WCED Central Office	1 902	R7 092 258	R27 704	R3 729	76	4.21	7	7
WCED North Office	3 726	R9 259 661	R46 068	R2 485	34	0.27	19	18
Worcester Soc. Serv	1 150	R1 835 474	R25 143	R1 596	70	0.15	16	14
Worcester WCED	4 324	R2 700 184	R17 882	R624	33	0.42	29	26
York Park	6 749	R10 715 558	R34 566	R1 588	201	0.31	22	18
Bellville Health Park	6 615	R9 009 858	R10 688	R1 362	140	0.62	8	7
Khayelitsha SSC	2 635	R23 308 492	R114 257	R8 846	95	0.76	13	10
Dan de Villiers SSC	1 006	R847 665	R26 490	R843	64	0.61	31	29
GMT Maitland	3 943	R13 425 748	R52 038	R3 405	41	1.25	15	15

WCED = Western Cape Education Department; DTPW = Department of Transport and Public Works

Health facility	Included		Excluded water	
	Size (m²)	No.	Size (m²)	No.
All clinics	3 909	9	256	1
All hospitals	770 621	13	365 210	1
Total	774 530	22	365 466	2

Health facility	Usable area m² 2022/23	Energy 2022/23 kWh/m²/annum	Water 2022/23 kl/m²/annum	Number of daily vistors per annum	Number of beds
All health facilities	774 530	87	1.57	136 642	-
All clinics	3 909	73	1.13	302 465	-
Barrydale Clinic	447	80	1.22	18 030	-
De Doorns Clinic	709	64	0.18	60 628	-
Graafwater Clinic	154	67	1.46	13 983	-
Kayamandi Clinic	617	132	2.02	46 560	-
Klawer Clinic	256	89	0.59	26 350	-
Lutzville Clinic	307	71	1.06	26 320	-
Pacaltsdorp Clinic	730	34	1.34	57 582	-
Villiersdorp Clinic	433	73	1.20	42 233	-
Haarlem Clinic	256	45	-	10 779	-
All hospitals	770 621	87	1.58	2 703 649	51 348
Beaufort West Hospital	5 456	107.15	0.45	42 639	684
Citrusdal Hospital	2 353	222.81	2.73	18 833	408
Robertson Hospital	3 027	137.87	2.61	51 833	600
Vredendal Hospital	3 789	155.46	1.13	62 409	900
Mitchells Plain Hospital	25 771	17.43	0.05	252 188	4 740
Groote Schuur Hospital	365 210	79.84	-	661 162	12 000
Caledon Hospital	5 815	146.46	0.41	42 345	600
Riversdale Hospital	4 964	145.5	1.08	29 444	600
Tygerberg Hospital	268 643	95.61	1.60	752 695	16 608
New Somerset Hospital	28 547	84.84	2.01	202 582	4 224
Helderberg Hospital	7 246	168.87	0.44	146 838	2 172
Karl Bremer Hospital	26 315	156.57	2.51	217 345	3 732
Khayelitsha Hospital	23 485	17.11	2.22	223 336	4 080

Education facility	Included		Excluded water	
	Size (m²)	No.	Size (m²)	No.
Primary schools	170 178	30	3 645	1
High schools	124 768	15	5 552	1
Total	294 946	45	9 197	2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Education facility	Useable area m² 2022/23	Energy 2022/23 kWh/m²/ annum	Water 2022/23 kl/m²/ annum	Number of pupils	Average school fee per learner	Number of classrooms
All educational facilities	294 946	15	0.60	870	R19 474	31
Primary schools	170 178	13	0.49	761	R18 752	28
Ashton Primary School	1 180	21	3.50	196	R13 750	9
Courtrai Primary School	7 396	8	0.13	614	R23 540	24
Dagbreek Primary School	3 138	18	3.05	507	No Fee School	20
Dalubuhle Primary School	3 181	12	0.36	683	No Fee School	20
De Waalville Primary School	1 339	21	2.78	795	No Fee School	37
Durbanville Preparatory School	4 274	19	0.75	891	R21 750	30
Durbanville Primary School	7 534	4	0.43	1 189	R24 050	41
Eikestad Primary School	9 158	8	0.10	762	R25 900	32
Groendal Primary School	3 033	15	0.33	792	No Fee School	28
Groot Brak Primary School	5 711	6	0.31	827	No Fee School	30
Mamre Primary School	2 524	23	0.61	697	No Fee School	26
Milkwood Primary School	32 692	18	0.07	670	R13 250	28
Mooi-Uitsig Primary School	4 414	11	0.51	711	No Fee School	26
Okkie Smuts Primary School	2 797	12	0.35	229	R11 100	10
Pacaltsdorp Primary School	3 558	22	0.75	1 339	No Fee School	36
Parkdene Primary School	5 738	10	0.13	1 162	No Fee School	33
Parow East Primary School	5 132	10	0.15	763	R8 800	26
PJB Cona Primary School	3 645	1	-	919	No Fee School	31
Plettenberg Bay Primary School	5 617	19	0.32	573	R19 580	27
Pniel Primary School	3 380	13	0.55	597	No Fee School	26
Prince Albert Primary School	3 379	11	0.82	983	No Fee School	31
Rhenish Primary School	7 087	10	0.29	558	R27 500	24
Rosemoor Primary School	3 738	7	0.69	644	No Fee School	24
Stellenbosch Primary School	8 364	18	1.26	825	R22 000	37
Swartberg Primary School	4 057	16	1.10	1 019	No Fee School	34
Towerkop Primary School	2 770	10	0.55	956	No Fee School	27
Volschenk Primary School	9 909	5	0.14	442	R12 017	17
Welgemoed Primary School	6 092	13	0.58	791	R25 704	37
Welwitschia Primary School	4 753	17	0.94	1 181	No Fee School	34
Worcester East Primary School	4 588	26	0.92	515	R13 580	28
High schools	124 768	18	0.74	1 089	R20 598	37
Atlantis Secondary School	7 521	16	0.59	1 476	No Fee School	44
Belgravia Secondary School	6 940	10	0.07	1 100	R7 035	30
Charleston Hill Secondary School	6 069	12	0.32	1 095	No Fee School	30
De Villiers Graaff High School	11 713	1	0.23	373	R19 219	15
DF Malan High School	6 087	10	0.99	1 122	R34 320	43
Durbanville High School	4 750	52	1.20	1 400	R35 500	43
Edgemead High School	3 460	76	1.67	1 279	R27 660	47
Eersterivier Secondary School	6 640	37	0.21	1 198	R2 000	33
Kulani Secondary School	5 552	34	-	1 094	No Fee School	36
Oaklands High School	5 257	3	0.82	1 162	R2 800	27
Olympia School of Skills	9 690	30	1.06	508	-	-
Outeniqua High School	19 450	12	0.22	1 703	R28 650	61
Pacaltsdorp Secondary School	3 556	30	3.72	1 399	No Fee School	38
Weskus Special School	19 329	9	1.06	450	-	-
York High School	8 754	13	0.81	977	R28 200	36

Case study: Western Cape Government energy performance

According to the World Green Building Council, buildings account for around 39% of the world's carbon emissions. Operational emissions, which include the energy required for heating, cooling and powering buildings, account for 28% of this total, while the remaining 11% comes from the production and use of construction materials.

South Africa is the world's 14th largest emitter of greenhouse gases. The proposed Post-2015 National Energy Efficiency Strategy requires state-owned buildings to reduce energy consumption by 50%, and commercial buildings by 37%, by 2030.

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 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.

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 000m² (in the case of privately owned buildings) or 1 000m² (in the case of state-owned buildings).

Benefits

Energy efficiency initiatives in buildings help to mitigate their climate change impacts. Making EPCs mandatory has the potential to drive energy efficiency by creating awareness of inefficiency among building owners and managers, facilitating efficiency comparisons between similar kinds of buildings, and creating a baseline for monitoring and improvement of energy consumption and efficiency. Establishing a baseline will assist building owners to identify potential areas for energy saving and enable well-informed decisions regarding energy efficiency upgrades.

The WCG appointed four inspection bodies to produce approximately 1 200 EPCs over a period of three years. Currently, 400 facilities have been issued with purchase orders – 1 theatrical facility, 38 office buildings and 1 161 schools throughout the Western Cape. The WCG anticipates having approximately 200 EPCs on display by December 2023.

The current WCG building types that require EPCs fall into one of three categories:

A2: Theatrical and indoor sport places – places where people gather to view theatrical, operatic, orchestral, choral, cinematographical or sports performances.

A3: Places of instruction – places where school children, students or other persons assemble for the purpose of tuition or learning.

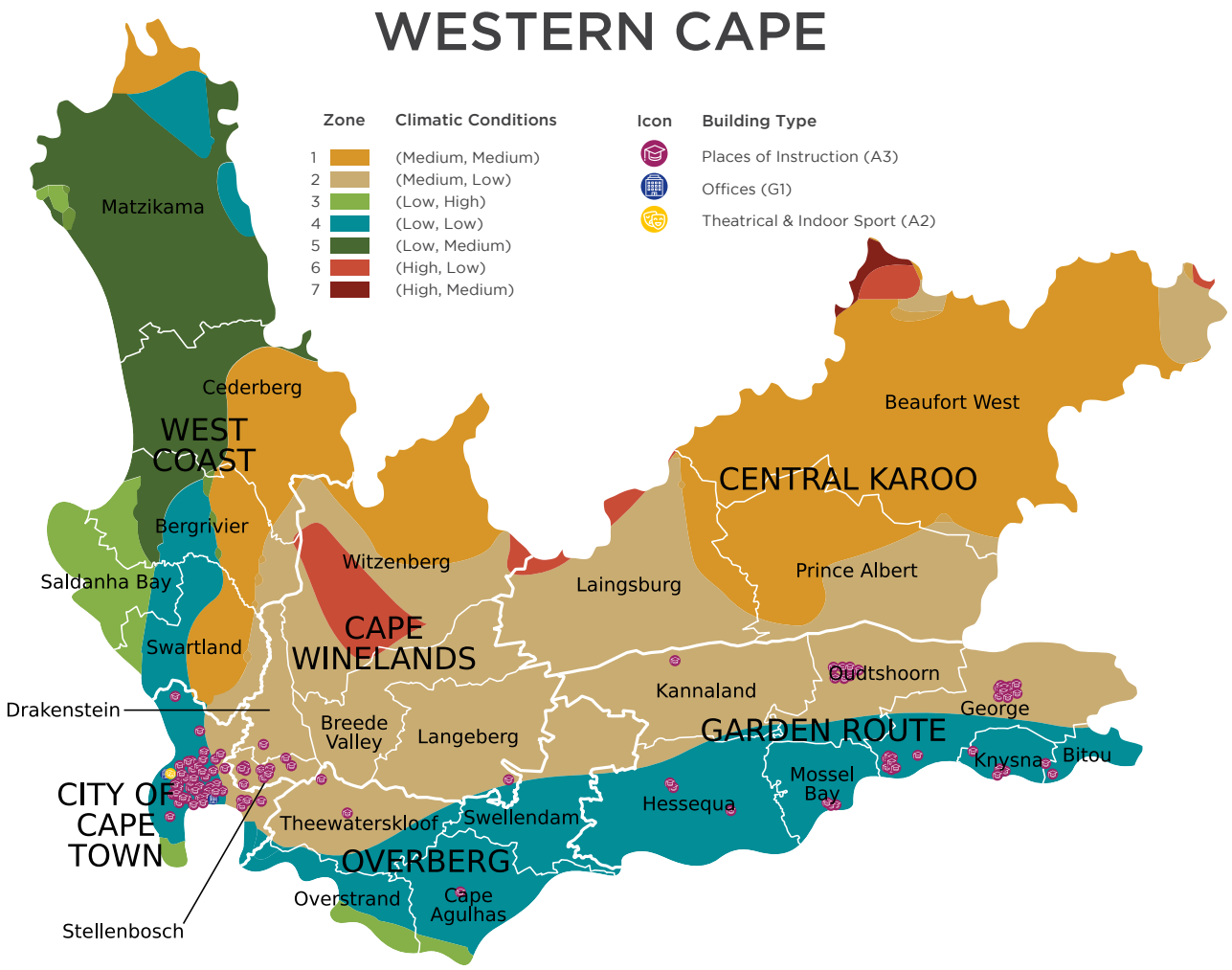
G1: Offices, including banks, consulting rooms, medical facilities, and commercial facilities.

Challenges to obtaining EPCs for buildings in the WCG property portfolio

 Regulatory constraints	• The need to keep track of changes in legislation. • A lack of clarity about the interpretation and implementation of new energy-efficiency regulations.
 Data quality constraints	• New record-keeping requirements mean the records of certain facilities are not suitable for EPC purposes. • Municipal accounts reflect estimated electricity consumption rather than actual consumption. • Remote electricity meters are not always calibrated.
 Financial/ budget constraints	• The high cost of obtaining EPCs. • The large number of facilities that must be inspected and certified. • The skilled project team that is required. • The fact that assessments must be repeated every five years. • The costs of travelling to remote facilities.
 Stakeholder engagement constraints	• Due to the risk of fraud, stakeholders are often hesitant to provide information. • Stakeholders do not always understand that EPCs are mandatory. • Stakeholders do not always grasp the potential value to them of having an EPC. • Some stakeholders are defensive because they believe they will be judged on their facilities' performance and appearance, and that they may be seen to be mismanaging their facilities.
 Data access constraints	• Some facilities do not have detailed records on site. E.g., because the finances of section 20 schools are centrally managed by provincial education departments, they do not receive municipal accounts. • There is generally a lack of separate remote meters in school facilities for boarding facilities and education buildings. • Historical data may not have been retained. • It is difficult to determine how to access data about certain facilities. • It may be difficult to find building/ floor plans. • It may be difficult to identify the personnel responsible for municipal data. • Data may not be up to date.
 Logistical constraints	• Changes in national legislation regarding the acceptable reporting period. • Difficulties with scheduling site visits to specific areas because some facilities in the area do not respond to requests for engagement. • The difficult and time-consuming nature of measuring consumption in complex facilities. • The fact that some facilities are located in areas where there are risks, sometimes potentially life-threatening risks.

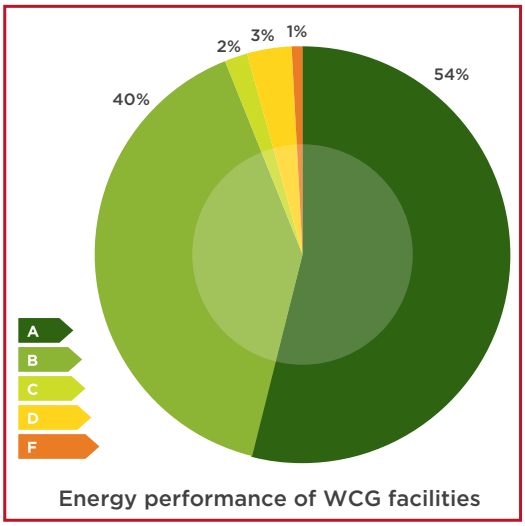
Western Cape Government's EPC performance status

The WCG has obtained 19.7% of the EPCs that have been issued in the Western Cape; 6% of the total number issued in South Africa. Forty percent of these are for places of instruction (A3). This indicates significant progress made on this project thus far.



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).

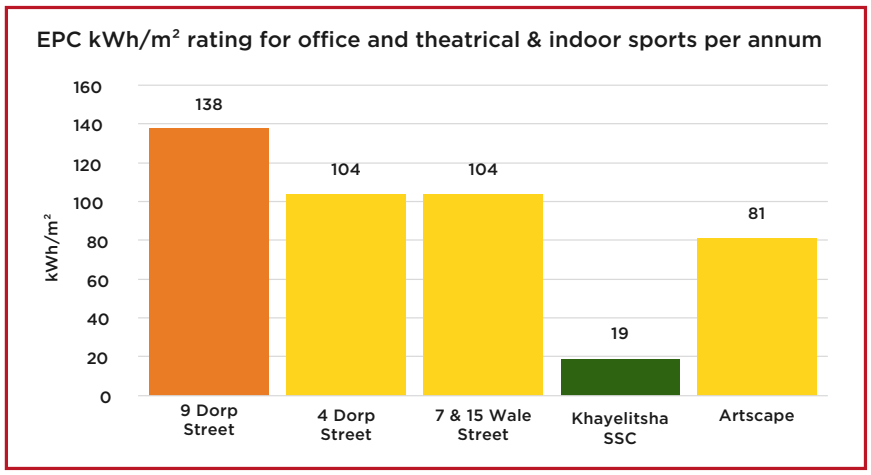
Over half (54%) of the EPCs obtained to date received an A energy performance rating, 40% received a B rating, 3% received a D rating (mostly G1 office buildings), and 1% receiving a rating of F.



Energy performance of WCG facilities

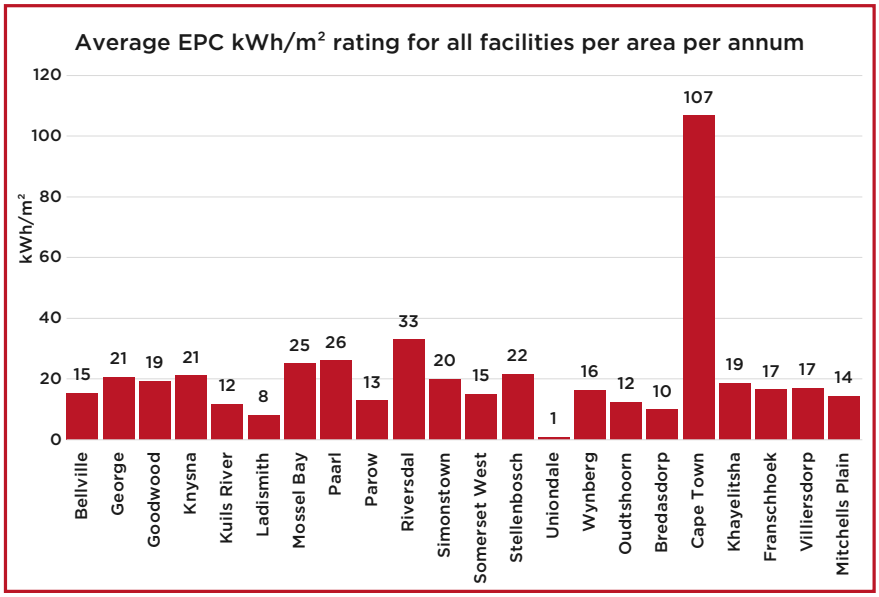
Artscape reported an energy performance of 81kWh/m², resulting in a D rating, which indicates an average energy intensity for the complex.

At an electricity consumption of 104kWh/m², 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 138kWh/m², 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.



Our facilities in the Garden Route District Municipality have the lowest average EPC ratings at 14kWh/m², followed by our facilities in the Overberg District Municipality at 20kWh/m², Cape Winelands District Municipality 21kWh/m² and City of Cape Town Metropolitan Municipality, which stand at 22kWh/m². 9 Dorp Street is the least efficient facility in this batch, with a rating of 138kWh/m².

The graph below reflects the average EPC ratings for all WCG facilities in the various municipal districts of the Western Cape that have obtained an EPC.



Uniondale High School (Uniondale) is the most efficient with 1kWh/m² followed by Towerkop Primary School (Ladismith) at 8kWh/m². The City of Cape Town Metropolitan Municipality has the highest average rating per EPC at 107kWh/m², due to the inclusion of the office and theatrical and indoor sports facilities.

In summary

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. We strongly support the implementation of EPCs to comply with the law, and whose advantages include heightened awareness of energy efficiency, cost-effectiveness, and improved property value. EPCs are a significant step towards promoting sustainable building practices and reducing the carbon footprint of our properties.

Chapter 5

The way forward

Dr GAVIN KODE
Deputy Director-General: Provincial Public Works

As we conclude this 12th iteration of the Western Cape Government Property Efficiency Report, we stand poised on the edge of an exciting and transformative future. Echoing the sentiments of Washington State Governor Jay Inslee, we acknowledge that "We are the first generation to feel the impact of climate change, and the last generation that can do something about it". These words reverberate with the resounding call underscored by former US President Barack Obama during COP21 in Paris, 2015:

> *"That future is one that we have the power to change. Right here. Right now. But only if we rise to this moment. … What should give us hope that this is a turning point, that this is the moment we finally determined we would save our planet, is the fact that our nations share a sense of urgency about this challenge and a growing realisation that it is within our power to do something about it."*

Global climate change is no longer a distant concern but an immediate and tangible challenge that demands our attention. As the custodian of the Western Cape Government property portfolio, our commitment as Provincial Public Works is to property efficiency. As immovable asset manager for the provincial government, we will become more anchored in resilience – the ability to adapt to and withstand the impacts of a changing climate. By prioritising the integration of green infrastructure, energy-efficient technologies, and sustainable practices, we will build a more resilient future for our immovable assets and thereby for our communities.

Our staff is our greatest asset. Early in 2021 we collaborated with the Green Building Council of South Africa (GBCSA) Academy to procure our green building certification and to inspire and capacitate our built sector personnel for enhanced efforts towards sustainability – to envision anew and to act anew. It was with great pride that I announced the qualification of 48 Provincial Public Works built sector professionals as Existing Building Performance (EBP) Accredited Professionals (APs) during the 2021/22 fiscal year. In the subsequent fiscal year, a total of 39 APs were accredited, comprising 20 Net Zero APs and 19 New Build APs. This investment in our staff to dream in the art of the possible through greening the built environment is an ongoing investment, and we hope to continue to empower our staff in this manner.

Continuing our momentum from last year, we registered both the 1–3 Dorp Street building and the 27 Wale Street building as candidates for EBP certification with the GBCSA. A task team of Provincial


Lees en Groei
Afrikaans
Lewensvaardigheid
Ons Leeshoekie

Public Works built sector volunteers has been established and is hard at work to prepare these EBP certification submissions. This group of dedicated volunteers is being mentored by members of the first task team that achieved the first ever Four-Star Green Star EBP certification for a public sector building in South Africa for our 9 Dorp Street head office building.

In the face of accelerating climate change, every building owner and each building in South Africa has a crucial role to play in curbing carbon emissions. Adopting energy efficiency measures across the spectrum is imperative, particularly considering the country's current energy crisis. The DOI has been preparing for a number of years to comply with the Department of Mineral Resources and Energy's mandatory Guidelines for the Display and Submission of Energy Performance Certificates for Buildings.

We received our first energy performance certification for a building recently, followed closely by 114 more, underscoring our unwavering commitment to curb carbon emissions. Obtaining EPCs for the Artscape Theatre Centre (as seen on the cover of this edition) and various schools has affirmed the Department's commitment to compliance, dedication and adherence to these energy performance regulations.

Renowned statesman Winston Churchill once said, "Success is walking from failure to failure with no loss of enthusiasm", a sentiment echoed by philosopher Ralph Waldo Emerson who proclaimed, "Nothing great was ever achieved without enthusiasm". Our great EBP success, albeit a first step following a number of setbacks along the way, was indeed achieved through both enthusiasm and the commitment and dedication of stalwart Provincial Public Works officials. These officials appreciate that one success is a single step in the journey and are already pressing on to secure many more EPCs.

We are determined to press on to harness technology and innovation on our sustainability journey. Our pursuit of property efficiency requires us to embrace technology as a powerful ally in our mission. Smart building systems, 3D scanning, data analytics, and robotic process automation are just a few examples of the innovative tools we are going to harness to usher in a more sustainable future. Our eMerge asset information management system has a number of well-developed modules that are accessed through a central portal. During this reporting period, substantial investment was made in the full implementation of the project control system for infrastructure projects, along with the integrated financial asset register encompassing the immovable asset register and facilities developed on provincial government land parcels. These initiatives resoundingly align with the innovation and futures planning cornerstones of the 2050 Western Cape Infrastructure Framework.

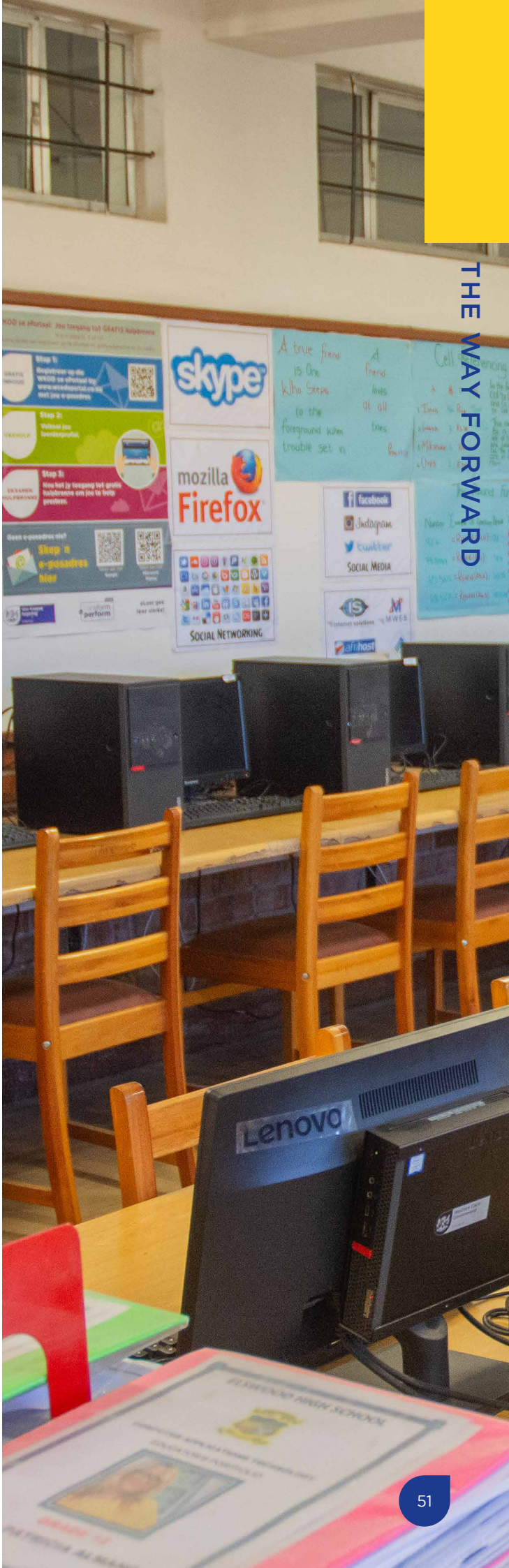
Another central tenet of the WCIF is the implementation of the stakeholder engagement and partnership model. Efficiency is not a solitary endeavour. To truly create an impact, we must actively engage and empower all stakeholders – government departments and agencies, other spheres of government, private sector partners, local communities and citizens.

Quoting Swedish teenage climate activist Greta Thunberg, “Change is coming, whether you like it or not”. Together, we can foster a shared commitment to property efficiency and climate action, creating a positive force for change. To this end, we will continue to collaborate with our infrastructure partners in the Department of Health and Wellness and the Western Cape Education Department to advocate for more sustainability features and improvements to all our infrastructure.

We will continue to collaborate with the GBCSA Academy to train more of our built sector staff and to work with the GBCSA to try to achieve a Precinct Green Star certification for our forthcoming residentially led Founders’ Gardens development on the Cape Town Foreshore. We will also continue our support of the annual GBCSA Convention, including getting as many of our built sector professionals to attend this always-inspiring conference. In the face of the current energy crisis, we have also reached out to the district and local municipalities in the province to share experiences and learnings about our own energy efficiency work and renewable energy installations at our own facilities.

As we go forward now, we go with the understanding that efficiency is not merely a goal but a philosophy that permeates all our actions and decisions. Climate change demands urgency, and our pursuit of property efficiency must reflect that urgency. With the wisdom of the multitude of others who have spoken out on the critical importance of climate action and property efficiency, we continue to chart our course towards a greener, more efficient and sustainable future. It is a future in which we embrace resilience, harness technology and unite stakeholders in a collective pursuit of change.

A Chinese proverb says, “The best time to plant a tree was 20 years ago. The second-best time is now”. This adage reminds us that our endeavours in sustainability, innovation, and property efficiency will undoubtedly shape a brighter future, one that resonates with the rhythms of our environment and our responsibilities as stewards of this planet. To the extent that we didn’t, couldn’t, wouldn’t plant trees 20 years ago, we are certainly trying to plant them now.



Acknowledgements

As was the case in previous editions, the unwavering commitment, diligent efforts, and innovative approaches of all stakeholders, particularly those within the Immovable Asset Management Chief Directorate of the Department of Infrastructure, have continued to play a central role in the production of this 12th edition of the Property Efficiency Report.

This edition further develops and broadens the coverage of health and education facilities portfolios that was introduced last year. The Department remains dedicated to accumulating valuable insights aimed at comprehensively enhancing infrastructure performance. At the same time, we continue to build on our in-depth analysis of the office portfolio's expenditure.

We are delighted to announce significant progress in meeting the legislative requirement for energy performance certificates in our office and education facilities by 7 December 2025, and we provide feedback on this achievement in the report.

Our heartfelt appreciation goes out to all individuals who have played a role in the achievements and breakthroughs highlighted in this report. The authenticity and resonance of the Western Cape Government's current motto, "For You", are distinctly evident in the narrative of success that has been carried in every edition of the Property Efficiency Report up to the present time.

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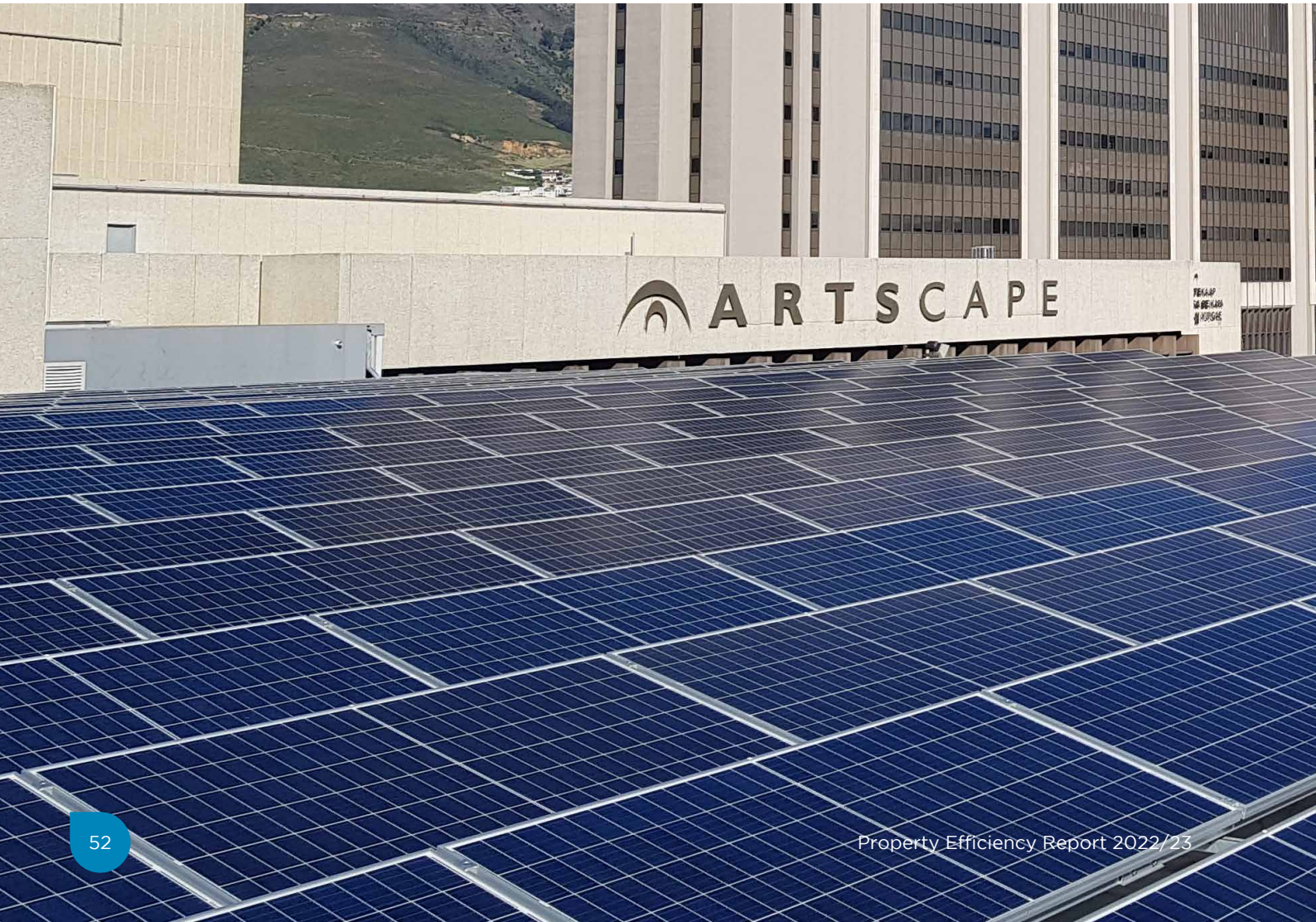

Data sources

Department of Infrastructure

- Chief Directorate: Immovable Asset Management
- Chief Directorate: General Infrastructure
- Chief Directorate: Health Infrastructure
- Chief Directorate: Education Infrastructure
- Departmental Communications

Department of Police Oversight and Community Safety

Various municipalities in the Western Cape

Green Building Council of South Africa

City of Cape Town

South African Property Owners' Association

Various reports from the governments of Australia and New Zealand

Zippia

iOffice

Disclaimer

The Western Cape Government has taken every reasonable step when preparing this report to present accurate and reliable information. While the sources of information used to prepare the report are believed to be accurate and reliable, no guarantee of accuracy or completeness can however be given. Should any errors be identified post-publication, the Department of Infrastructure undertakes to issue an erratum to effect any necessary corrections.

Glossary

AP	GBCSA Accredited Professional qualification
Benchmark	In this report, the study sample portfolio is benchmarked against a comprehensive database of office buildings in the same geographical area compiled by the Green Building Council of South Africa, and a selected sample from the City of Cape Town's property portfolio.
Capital expenses	Includes capital expenditure such as adaptation of equipment, information technology infrastructure and hardware installations. For owned buildings, it also includes internal, mechanical, electrical, external and structural repair and maintenance, minor improvements, security, cleaning, waste disposal, water, sewerage and electricity.
CBD offices	The 2022/23 report study sample comprises the 16 WCG offices in the Cape Town Central Business District. The portfolio comprises around 126 843m^2 of occupied office space.
Cost/ total costs	Total occupancy costs for leased buildings are comprised of annual operating expenses, such as rent and rates and taxes, repairs and maintenance, service charges and support services, and management fees. Annualised capital expenses comprise adaptation, equipment, information technology infrastructure and hardware installations, internal, mechanical, electrical, external and structural repair and maintenance, minor improvements, security, cleaning, waste disposal, water, sewerage and electricity expenses. The total occupancy costs for owned buildings is comprised of an approximate market rental rate to facilitate direct comparison with leased space. Annual operating expenses include rates and taxes, support services, repairs and maintenance, and management fees.
DOI	Department of Infrastructure
EBP	GBCSA Existing Building Performance tool for the measurement and rating of the environmental performance of existing buildings which provides insight into all major aspects of environmental sustainability that should be considered when assessing the operational performance of existing buildings.
Education buildings	The 45 Western Cape Education Department primary and high schools included in the study sample of this report.
Energy performance certificates (EPCs)	EPCs benchmark the energy efficiency of a building against industry benchmarks or national norms. EPCs carry ratings on energy use and CO_2 emissions and are applied through the application of a standard method defined in South African National Standard 1544:2014 and SANS10400-XA 2021. For EPC purposes, properties are classified into: Type of occupation, Climatic zone and Energy consumption in kWh/m^2. The properties in the PER 2022/23 are classified in groups G1, A2 and A3; climatic zone 1 to 7.
FTE	Full-time equivalent employee
GBCSA	Green Building Council of South Africa
Health buildings	The 22 WCG hospitals and clinics included in the study sample of this report.
iOffice	A United States-based company specialising in office space planning, employee experience and asset maintenance.
kL	Kilolitre – 1 000 litres, a cubic metre
kWh	Kilowatt hour – a unit of energy equal to 1 000 watt hours delivered continuously for one hour. Average annual power consumption can be expressed in kilowatt hours per year, per square metre, or per FTE user.
MSCI	A United States finance company which provides worldwide equity, fixed income, hedge fund stock market indexes, and multi-asset portfolio analysis tools. This report uses data extracted from the MSCI database for 2022/23.
MWh	Megawatt hour – 1 000 kilowatts of electricity delivered continuously for one hour.
Non-CBD offices	The 19 WCG offices outside the Cape Town Central Business District in the study sample of this report (64 618m^2 of occupied office space).

Occupancy costs	Costs related to occupying space, comprising rent, real estate taxes, property taxes, insurance on building and contents, depreciation, and amortisation expenses.
Occupied space (useable area)	The net internal area measured in square metres, using the SAPOA definition.
Operating costs	Expenses related to the operation and continued maintenance of office buildings. These are municipal charges, repairs and maintenance, soft services, and other operating costs.
Performance	The performance of the Western Cape Government office study sample portfolio assessed using three standard metrics of property efficiency – cost per square metre, space per FTE, and cost per FTE – to report internal efficiencies in comparison to benchmark average performance metrics of South African corporate occupiers. In addition, sustainability performance has been assessed using energy and water consumption metrics.
Reporting period	The reporting period for the Property Efficiency Report 2022/23 is from 1 April 2022 to 31 March 2023.
SANS	South African National Standard
SAPOA	South African Property Owners' Association
Serendipityremix	Property company offering advanced research and consulting services in the built environment.
Soft services	Soft services in the facilities management context are non-technical and non-physical duties primarily centred on ensuring the safety, cleanliness, and comfort of a facility's occupants, e.g., cleaning and landscaping.
Solar PV	Rooftop solar photovoltaic systems
SSC	Shared Service Centre – an office building occupied by various WCG departments and often with shared facilities and a public interface.
WCG	Western Cape Government
SSC	Shared Service Centre – an office building occupied by various WCG departments and often with shared facilities and a public interface.
WCG	Western Cape Government
WCIF	Western Cape Infrastructure Framework
Zippia	A United States-based company specialising in human resources and career building.

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Western Cape Government

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