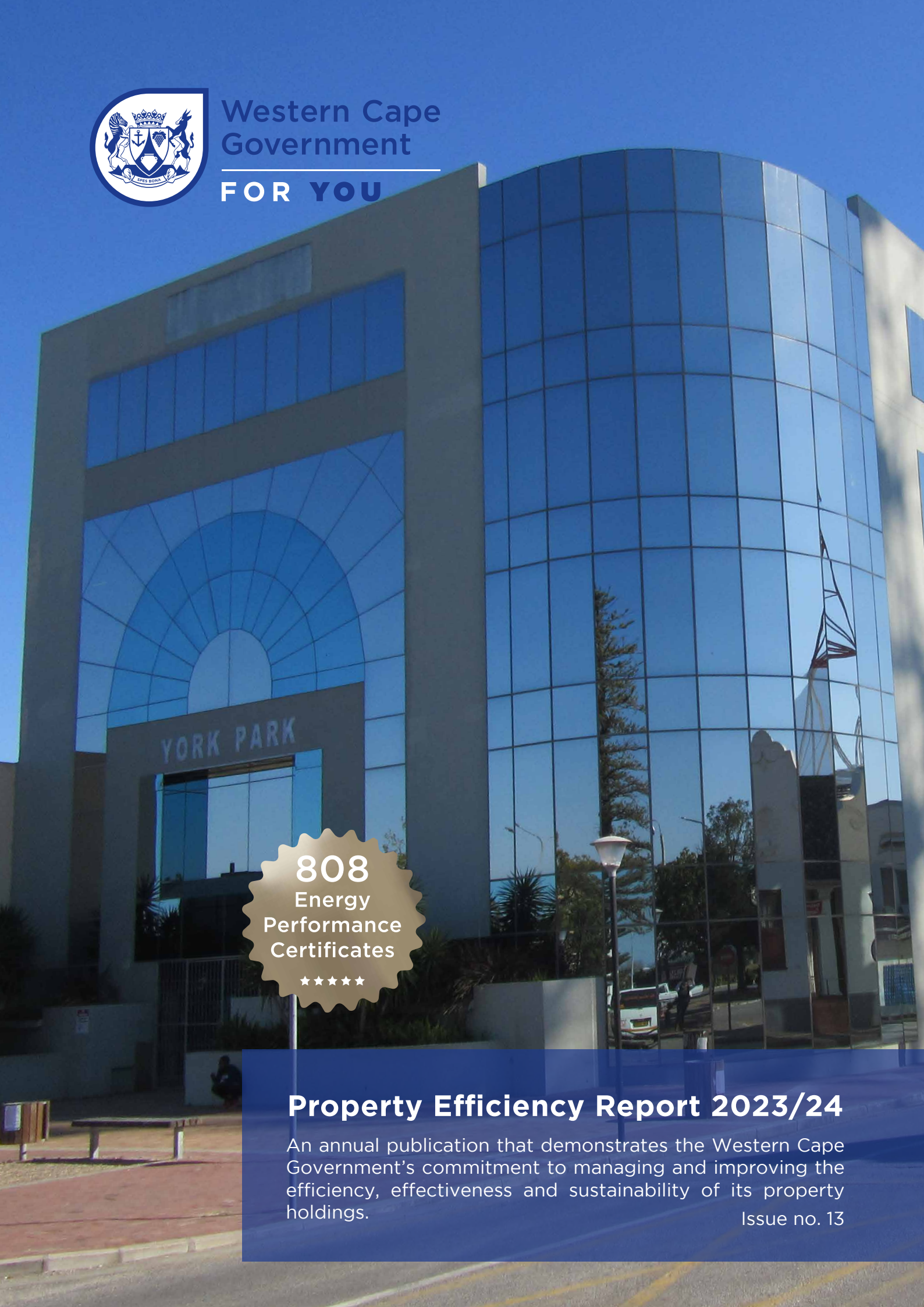
Western Cape Government

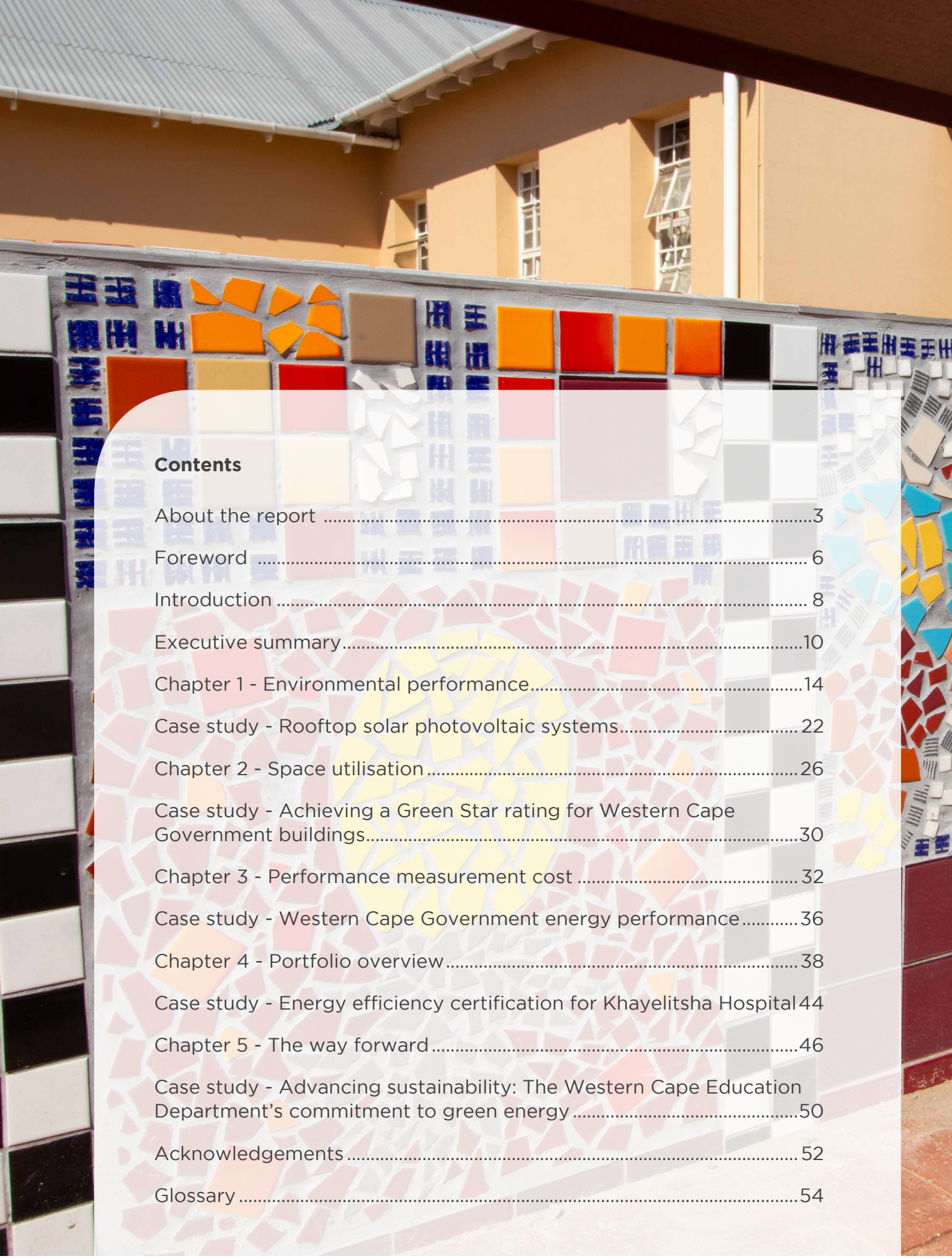
FOR YOU



Property Efficiency Report 2023/24

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. 13



Contents

About the report

The Western Cape Government (WCG) Property Efficiency Report (PER) was introduced in 2013 to analyse data from the 2011/12 period. It is a comprehensive portfolio study comprising a selected sample of buildings. Initially established to set a benchmark for public-sector building performance assessments, the PER continues to uphold this benchmark in its 13th edition, which covers the period April 2023 to March 2024.

In the 11th edition, the scope of evaluated office buildings was expanded to include all office facilities exceeding 500m². This 13th edition sees further enhancements with the addition of comprehensive electricity and water efficiency analysis for a broader array of properties. Notably, the number of health facilities in the sample has increased from 22 to 34, and education facilities from 45 to 60. Where feasible, data have been compiled for at least three years for each property within the current scope of the PER. Additionally, data from the Energy Performance Certification (EPC) process have been integrated into this report.

The current edition highlights the WCG's enduring commitment to transparency in the management of its assets and operational resources, primarily through the Department of Infrastructure (DOI), the steward of WCG's immovable assets. The information is sourced from the various DOI components, property occupants, and other stakeholders.

The immovable asset portfolio reviewed in this report includes a diverse array of buildings located within the Cape Town Central Business District (CBD) and various non-CBD locales across the Western Cape. Likewise, health and education facilities included in this 13th edition of the PER are distributed throughout the province.

Reporting period and scope

This report assesses the performance of the 37 owned and leased office buildings exceeding 500m² from the WCG's portfolio during the 2023/24 period.

Key changes from the previous report include:

The exclusion of the Wynberg Social Services facility from the study sample due to major refurbishments during the reporting period;

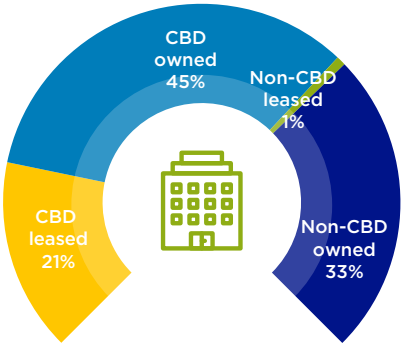
The removal of 68 Orange Street from the sample, as it was utilised solely as a storage facility during the period, with no permanent on-site staff;

An increase in the number of health facilities to 34 and education facilities to 60.

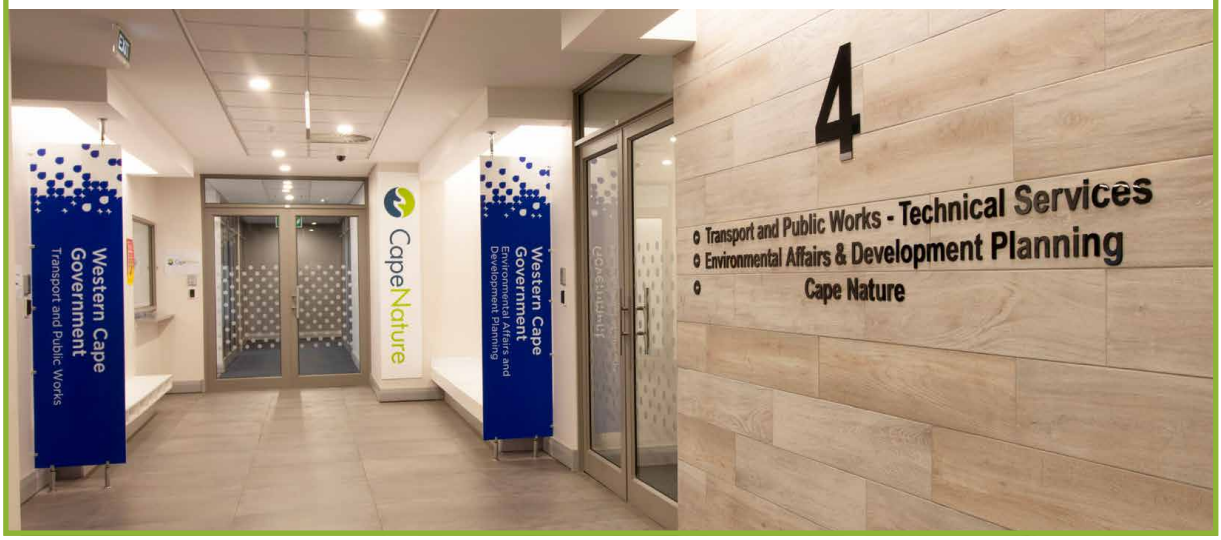
Office portfolio

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



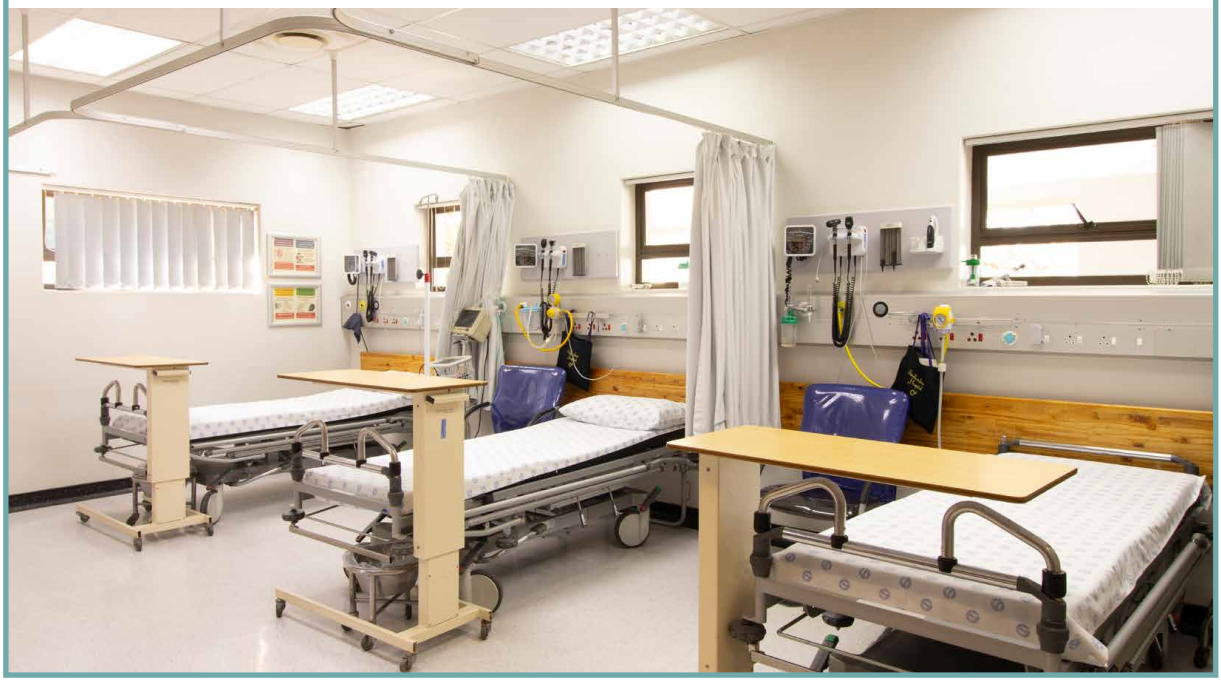
Office portfolio percentage split based on useable m²



Health portfolio

34 health facilities = **890 911m²**

- **13** clinics — 5 219m²
- **21** hospitals — 885 692m²

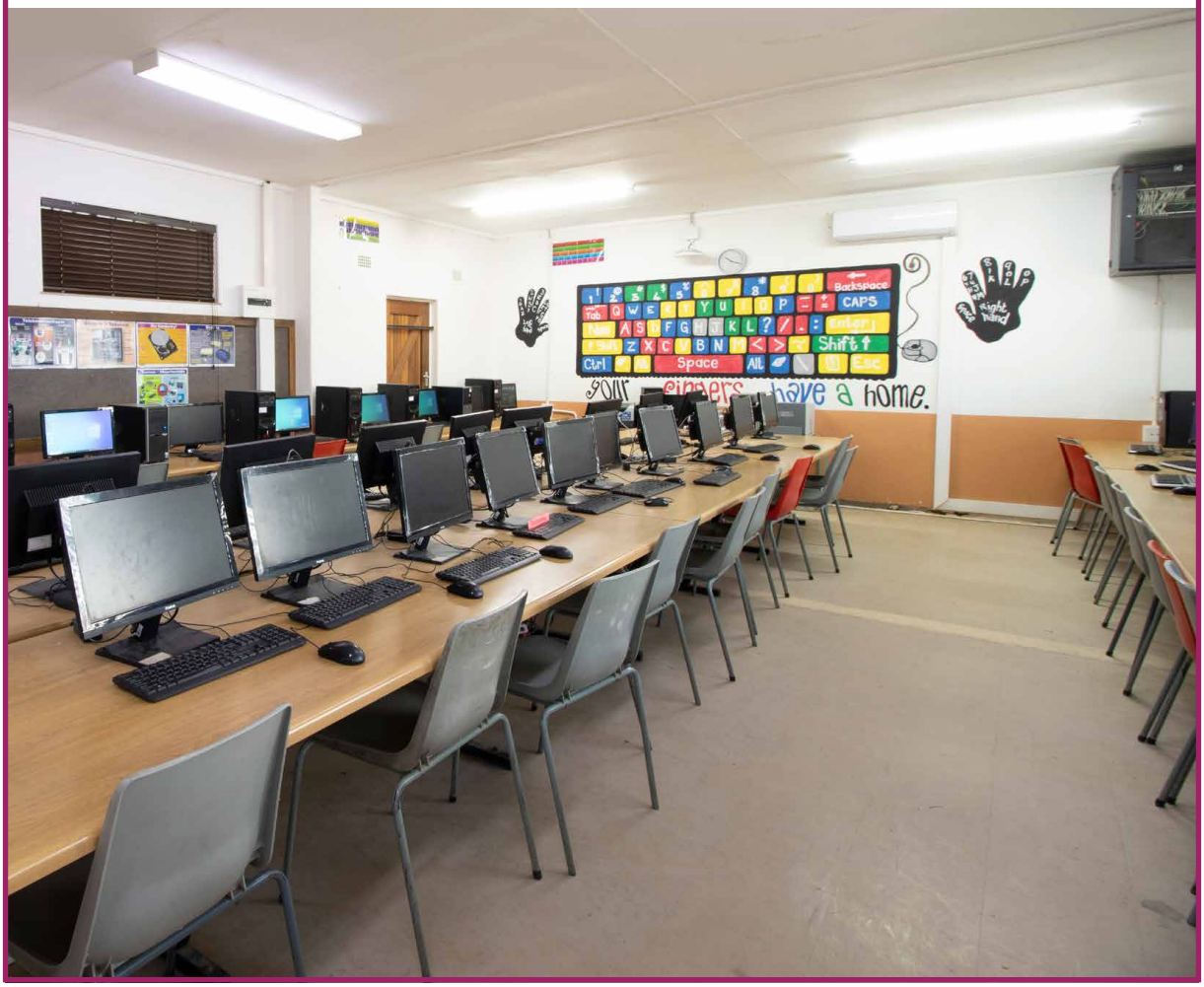


Education portfolio

60 education facilities = 401 115m²

23 high schools 196 585m²

37 primary schools 204 530m²



Data management and access

The value of accurate data to inform decision-making within any organisation or enterprise cannot be overstated. To establish a dependable baseline, we meticulously collect primary data from various stakeholders and perform careful cross-checks to ensure accuracy. Each meter reading is scrutinised against consumption details from municipal accounts, with discrepancies swiftly addressed and resolved. The extracted data are subjected to rigorous analysis employing robust methodologies to guarantee precise interpretations.

The Green Building Council of South Africa (GBCSA) office building database serves as a benchmark for evaluating the WCG's office portfolio. Landlords in the public and private sectors use the GBCSA's energy and water benchmarking tool to measure their buildings' performance against similar structures geographically and within their own property portfolios. Our private sector cost benchmark is informed by various sources, including private landlords, Rode and Associates, MSCI, the South African Property Owners' Association (SAPOA), and other publicly accessible reports and indices.

In our ongoing pursuit of optimal performance, we also continually benchmark our energy efficiency against a selection of similar reports for City of Cape Town (CCT) office buildings.

Foreword

TERTUIS SIMMERS

Provincial Minister of Infrastructure

As the Provincial Minister of Infrastructure, I recognise the crucial role our property holdings play in delivering essential public services. Reflecting on Peter Drucker's words, "The best way to predict the future is to create it", I am reminded of our mission at the Department of Infrastructure - not just to respond to challenges, but actively to shape the future of our province's infrastructure landscape.

My priorities for the seventh administration focus on accelerating delivery at speed and scale, embracing new materials and methods, fostering private sector involvement through strategic partnerships, unlocking and securing new funding sources (including expanding corporate social investment), and building the sector by enhancing skills and establishing a trusted infrastructure pipeline.

The Department has consistently demonstrated its capacity for innovation, resilience, and strategic foresight in managing our immovable assets. This year's Property Efficiency Report details the results of our efforts to optimise asset use, ensuring efficient management, responsible maintenance, and full

utilisation. Our commitment to excellence in public asset management underlines our dedication to ensuring that government properties serve the people of the Western Cape effectively and sustainably.

Guided by the Western Cape Infrastructure Framework 2050 (WCIF), we are committed to creating a sustainable and inclusive infrastructure landscape. This blueprint is not just a plan but a strategic approach to enhancing public infrastructure, integrating innovative materials, and unlocking new funding sources through private sector collaboration. We firmly believe that infrastructure is central to driving economic growth, creating jobs, and alleviating poverty in the fastest and most sustainable way.

Our focus extends beyond economic growth; we are dedicated to restoring dignity to communities through every product, service, and initiative we deliver. Our key clients, the most vulnerable in our province, will benefit from strong partnerships with other government spheres, entities, and the private sector. By creating resilient, responsive, and appropriate capacity, we strive to ensure that our infrastructure meets today's needs and anticipates tomorrow's demands.

As we reflect on the past year's achievements, I express my deepest gratitude to the dedicated teams within the Department of Infrastructure and specifically the Public Works Branch. Their hard work and commitment have been instrumental in our successes. I also acknowledge our partners and stakeholders, whose support and collaboration are invaluable in driving our shared vision for a sustainable, efficient, and equitable future.

Looking ahead, we will continue to explore innovative solutions and embrace new technologies to enhance our property management practices. Our goal is to ensure that the Western Cape Government's properties are not fit for purpose today only, but are also resilient and adaptable to the challenges of tomorrow.

> *The Department has consistently demonstrated its capacity for innovation, resilience, and strategic foresight in managing our immovable assets.*

Introduction

ADV. CHANTAL SMITH

Head: Department of Infrastructure

I am pleased to present the 13th edition of the Western Cape Government Property Efficiency Report. This report highlights the ongoing efforts and achievements of the Department of Infrastructure as the custodian of the Western Cape Government's immovable assets. It showcases our commitment to enhancing the efficiency, effectiveness, and sustainability of our property holdings. Guided by the Government Immovable Asset Management Act of 2007, we adhere to principles of transparency, evidence-based management, and responsible resource use.

In recent years, environmental, social, and governance (ESG) considerations have become increasingly important across all sectors of society. ESG factors are now central to decision-making processes, helping custodians identify and manage risks such as climate change, supply chain disruptions, and reputational concerns. There is also growing pressure from governments, regulatory bodies, and stakeholders for greater transparency and accountability in all ESG matters.

ESG principles are crucial in the private sector and are equally important in the public sector. For government departments, including ours, ESG principles support improved financial performance, risk mitigation, and the cultivation of positive relationships with stakeholders. The Department of Infrastructure operates under a comprehensive regulatory framework, governed by more than 70 pieces of legislation and various regulations that shape our three distinct supply chains - general goods and services, infrastructure and construction goods and services, and immovable assets, such as land and buildings. Alongside these regulations, we have a robust corporate governance structure, enterprise risk management system, and ethical standards that ensure sound governance and accountability. This robust structure ensures that governance, or the 'G' in ESG, is well accounted for in our operations.

The environmental component of ESG is central to our operations, guiding our approach to environmental stewardship within the built sector. This involves addressing critical challenges, including climate change, greenhouse gas emissions, water security, biodiversity loss through development, and waste management. This report provides an account of our efforts to address these challenges, demonstrating our commitment to aligning with broader sustainability objectives.

The urgency of these sustainability efforts is underscored by United Nations Secretary-General António Guterres in the 2023 Special Edition of the Sustainable Development Goals (SDGs) Report. He emphasised that the SDGs provide a universally agreed roadmap for bridging economic and geopolitical divides, restoring trust, and rebuilding solidarity. He warned that failure to advance these goals could deepen inequalities and lead to a fragmented global landscape. As we reach the midpoint of the SDG Agenda, the need for accelerated action is more pressing than ever. The Public Works Branch recognises its role in this global endeavour and is committed to aligning our activities with the SDGs to contribute to a sustainable future.

Over the years, we have implemented numerous projects and programmes aimed at fulfilling our mandate, with a strong emphasis on sustainability. Recently, we have collaborated with the Agency

for Facility Operations of the Flanders regional government, learning from its approach to integrating sustainability into its business strategy. This partnership aligns seamlessly with the 2030 Agenda for Sustainable Development, which aims to set the world on a path to a sustainable and resilient future. The Public Works Branch is now adopting the SDG framework to guide our sustainable management of the assets under our care and to measure our progress against these global targets. Moving forward, we will continue to align our efforts with the UN SDGs, using this framework to assess our contribution to the global 2030 Agenda.

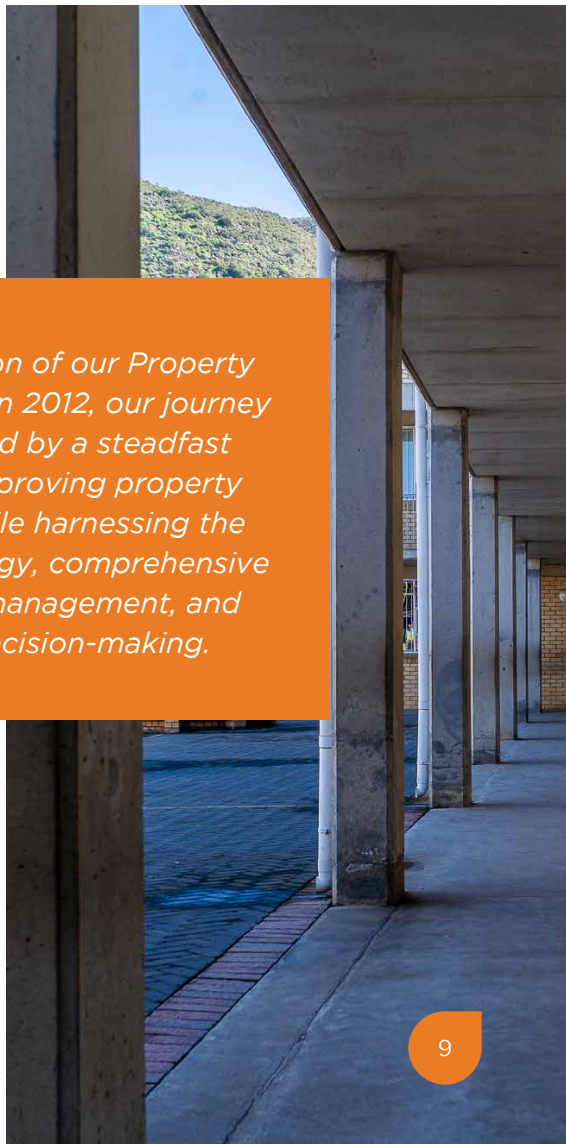
From a social perspective, we will enhance our focus on social impact by considering how our actions affect people, culture, and communities. This includes prioritising diversity, inclusivity, human rights, and responsible supply chain management. The Department of Infrastructure is committed to maximising economic growth through its infrastructure projects, particularly by ensuring that local communities benefit from the opportunities created by these projects. This includes employing local community members and procuring goods and services from local suppliers and subcontractors. We are mindful of the influence that stakeholders may have on employment practices on construction sites and are dedicated to maintaining ethical and inclusive practices in all our operations.

Corporate social investment is another area where we see significant potential to advance the 2030 Agenda. By addressing social and environmental challenges and creating shared value for communities and businesses, CSI can be a powerful force for achieving the SDGs. The Department is determined to leverage CSI more effectively, developing a CSI Pledge, a Partnership Framework, and a CSI Strategy to drive this ambition. This initiative will not be purely outward-looking but will also encourage all team members within the Department to make a meaningful impact in their areas of operation. Our approach to CSI will go beyond traditional charitable or strategic programmes, focusing instead on leveraging CSI to create sustainable, widespread impact. This strategy involves collaborating with other governments, non-profits, and local communities to ensure the effective implementation of CSI projects. By moving beyond isolated initiatives to systemic impact, we will aim to achieve transformative change and lasting benefits for society.

Since the inception of our PER in 2012, our journey has been marked by a steadfast dedication to improving property performance while harnessing the power of technology, comprehensive asset life cycle management, and data-driven decision-making. The demand for efficient and effective property management has never been more critical, given the constraints on both financial and natural resources, which call for a more strategic allocation and use of government assets. As we move forward, we understand that property efficiency management is not about isolated actions but rather about adopting a holistic and integrated approach. Our strategy is rooted in whole asset life cycle management, ensuring that every phase - from design and construction to operation and eventual decommissioning - is carefully planned and executed with a renewed focus on ESG.

Since the inception of our Property Efficiency Report in 2012, our journey has been marked by a steadfast dedication to improving property performance while harnessing the power of technology, comprehensive asset life cycle management, and data-driven decision-making.

By addressing environmental challenges, enhancing governance, and focusing on social impact, we are not only contributing to long-term sustainability and resilience, but also aligning our efforts with global sustainability goals. We remain dedicated to serving the people of the Western Cape and to advancing the broader agenda of sustainable development, as reported by the Public Works Branch in this year's Property Efficiency Report.



Executive summary

Building performance highlights

	2022/23						2023/24					
	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 (m^2)	196 853	41 959	154 894	128 211	68 642	-	196 853	41 959	154 894	128 211	68 642	-
WCG portfolio performance data (m^2)	191 461	41 959	149 502	126 843	64 618	-	191 461	41 959	149 502	126 843	64 618	-
Accommodated office staff	10 232	2 873	7 359	6 410	3 822	-	9 816	2 819	6 997	6 571	3 245	-
Cost/m^2	2 833	3 687	2 566	3 032	2 429	2 309	3 118	3 761	2 937	3 345	2 671	2 448
Cost/FTE	62 623	67 595	60 611	73 895	45 105	-	70 161	65 350	72 068	76 179	58 753	-
m^2/FTE	20	17	20	19	20	-	23	18	24	21	24	-
m^2/desk	19	15	20	19	17	-	19	15	20	18	20	-
Energy kWh consumed per FTE/pa	2 443	2 227	2 531	3 050	1 499	-	2 516	2 280	2 610	2 975	1 646	-
Water kL consumed per FTE/pa	12	11	12	12	12	-	14	13	14	13	15	-
Energy kWh/m^2/pa	113	136	107	130	81	240	112	131	106	131	75	240
Water kL/m^2/pa	0.58	0.77	0.53	0.55	0.65	0.73	0.63	0.89	0.56	0.59	0.69	0.90

FTE = full-time equivalent.

Report highlights

13th This is the 13th edition of the Property Efficiency Report.

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

- The total office portfolio size included in the review is 191 461m². 68 Orange (1 368m²) has been excluded as it is currently used for storage without on-site permanent staff. The Wynberg Social Services facility (4 024m²) has been excluded due to significant refurbishments being undertaken at the building during the reporting period.
- The WCG has received 808 energy performance certificates (EPCs).
- WCG remains committed to enhancing the efficiency and modernisation of facilities within its owned buildings.

New additions

- Health facilities: the reporting portfolio was expanded from 22 to 34, namely 13 clinics and 21 hospitals.
- Educational facilities: the portfolio was expanded from 45 to 60 (23 high schools and 37 primary schools).
- In future editions, we plan to further increase the reporting portfolio sizes.

Office buildings

WCG-owned buildings recorded a consumption rate of 106kWh/m²/pa, indicating 19.1% greater efficiency over leased buildings, which had a rate of 131kWh/m²/pa.

- A 0.9% reduction in electricity usage: 113kWh/m²/pa to 112kWh/m²/pa, with WCG outperforming the private sector benchmark of 240kWh/m²/pa.
- Non-CBD owned buildings consumption decreased by 7.4%, from 81kWh/m²/pa to 75kWh/m²/pa, outperforming leased properties by 8.5%.
- Despite outperforming private sector and EPC benchmarks, the non-CBD portfolio was 24% less efficient compared to the CCT benchmark of 57kWh/m²/pa.
- Leading buildings in solar energy production include the Elsenburg Administration Offices (39.4% solar) and the Government Motor Transport (GMT) building (37.8% solar).

CBD owned buildings maintained exceptional water efficiency at 0.47kL/m²/pa, outperforming leased buildings by 47.8%.

- Water consumption across the portfolio increased by 8.6%, from 0.58kL/m²/pa to 0.63kL/m²/pa.
- Owned buildings achieved a water consumption rate of 0.56kL/m²/pa, significantly outperforming the leased buildings benchmark of 0.89kL/m²/pa by 37.1%.
- Leased buildings saw a 15.6% increase in water consumption, rising from 0.77kL/m²/pa to 0.89kL/m²/pa.
- Non-CBD leased buildings reduced water consumption by 32.4%, from 1.11kL/m²/pa to 0.75kL/m²/pa.

Health facilities

Electricity consumption

- Health facilities' electricity consumption improved by 6.4%, from 94kWh/m²/pa to 88kWh/m²/pa.
- Clinic electricity consumption improved by 2.8%, while hospitals improved by 6.4%.

Water consumption

- Health facilities averaged a water consumption rate of 1.60kL/m²/pa.
- Clinics saw the highest increase, with rises at De Doorns Clinic (94.5%), Klawer Clinic (46%), and Barrydale Clinic (29.7%).

Education facilities

Electricity consumption

- Overall electricity consumption in education facilities decreased from 15kWh/m²/pa to 14kWh/m²/pa, reflecting a 6.7% improvement in energy efficiency.
- Primary schools achieved a notable reduction in energy consumption, from 11kWh/m²/pa to 10kWh/m²/pa, achieving a 9% improvement in efficiency.
- High schools' energy consumption remained stable during the reporting period, indicating steady efficiency.

Water consumption

- An overall increase in water consumption was observed across education facilities.
- High schools water usage increased to 0.74kL/m²/pa from 0.68kL/m²/pa, resulting in an 8.8% decrease in water efficiency.
- Primary schools, the most water-efficient component of the education sample, showed only a slight increase in water consumption, from 0.59kL/m²/pa to 0.61kL/m²/pa, a 3.4% rise.

Space utilisation

CBD-owned buildings improved efficiency, reducing space from 22m²/desk to 20m²/desk, a 9% enhancement.

- The WCG portfolio has an average desk space of 19m²/desk, which is 35.7% less efficient compared to the public sector benchmark of 14m²/desk.
- Leased buildings are the most space-efficient component of the CBD portfolio, although desk space increased from 14m²/desk to 15m²/desk.
- 1 North Wharf Square recorded exceptional efficiency at 11m²/desk.
- Non-CBD leased properties significantly improved, reducing space from 20m²/desk to 16m²/desk, showing a 20% efficiency gain.
- Non-CBD owned properties experienced a decline in efficiency, with space increasing from 17m²/desk to 20m²/desk, a 17.6% decrease.
- WCG employee density measured in square metres per full-time equivalent (FTE) stands at 22m²/FTE, similar to sectors like law enforcement in the USA.
- There has been an overall decrease in portfolio efficiency, with space utilisation rising from 20m²/FTE to 23m²/FTE, a 15% efficiency decline.
- At 18m²/FTE, leased buildings performed better than owned buildings, slightly up from 17m²/FTE.
- Owned buildings saw an increase to 24m²/FTE from 20m²/FTE, a 20% decline in efficiency.
- CBD leased buildings' efficiency decreased by 12.5%, with space rising from 16m²/FTE to 18m²/FTE.
- CBD owned buildings showed a similar trend, with space increasing from 21m²/FTE to 23m²/FTE, a 9.5% increase.
- Space utilisation in Non-CBD owned buildings deteriorated from 20m²/FTE to 25m²/FTE, a 25% increase.
- Non-CBD leased buildings were the top performers in efficiency, reducing space from 20m²/FTE to 16m²/FTE, a 20% improvement.

Occupancy costs

Occupancy costs exceed the private sector benchmark by 21.5%, driven by capital and maintenance costs, emergency repairs, modernisation efforts, and compliance with safety standards.

- Office space costs increased by 10.1%, from R2 833/m² in 2022/23 to R3 118/m² in 2023/24.
- Capital project costs rose by 14.1% for all office buildings.
- Scheduled maintenance increased by 13.6% overall and surged by 50.4% for leased buildings, while capital project costs for leased buildings decreased by 28.3%.
- Owned office buildings saw costs rise significantly from R2 566/m² to R3 761/m², making them the costliest in the portfolio.
- Leased buildings' costs decreased by 20.3%, from R3 687/m² to R2 937/m².

Chapter 1:

Environmental performance

In the 13th edition of the Property Efficiency Report, we are pleased to announce an expansion of the number of buildings included in the study sample. In the 2021/22 report, the inclusion criteria for office buildings were updated by lowering the minimum space requirement from 1 000m² to 500m². To maintain the accuracy of the data, buildings no longer functioning as office spaces were excluded.

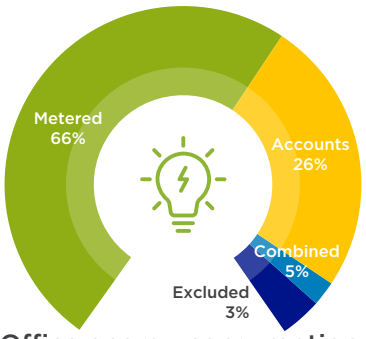
This report builds upon previous analyses of electricity and water efficiency in educational and healthcare facilities, significantly increasing the number of facilities reviewed. The number of educational facilities has risen from 45 to 60, marking a 33.3% increase, while healthcare facilities have grown from 22 to 34, a 54.5% rise. Additionally, we have introduced a new dataset for each newly included property, covering the past three years. This update aims to provide a deeper and more accurate understanding of efficiency trends in these areas.

Effective planning and responsible resource use are crucial for promoting sustainable development and ensuring societal and environmental well-being. The approach emphasises strategic management, conservation efforts, and careful evaluation of the long-term impacts of resource consumption. These strategies are essential for achieving environmental sustainability, fostering economic resilience, and safeguarding the well-being of current and future generations. Maximising the efficient use of natural resources remains the primary objective.

The EPC team has made significant progress in securing and ensuring compliance with legislative energy performance certificates. As a result of these efforts, 808 buildings have been certified.

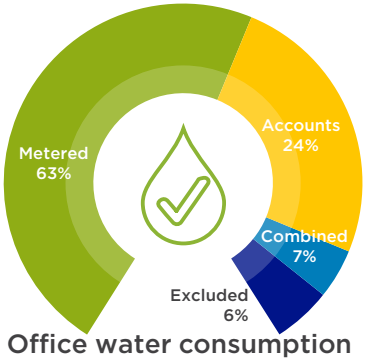
Office buildings

The Western Cape Government employs a comprehensive approach to collecting electricity consumption data, incorporating municipal and Eskom account information, along with remote metering systems. Of the energy data collected, 66% is sourced directly from internal energy consumption meters. Additionally, 26% comes from monthly municipal and Eskom accounts submitted by various institutions, and 5% is derived from a combination of metered data and these accounts. It is important to note that approximately 3% of the dataset was excluded from the analysis due to ongoing construction and modernisation activities at certain buildings in the study sample.



Office energy consumption data compilation per m²

The water consumption dataset is derived from three primary methods of data collection. Direct metered readings account for 63% of the data, while 24% is obtained from monthly municipal accounts. The remaining 7% is collected through a combination of metered data and municipal accounts. Additionally, 6% of facilities were excluded from the analysis due to factors such as leased buildings lacking separate water billing, ongoing modernisation projects, and unresolved discrepancies in municipal accounts.



Office water consumption data compilation per m²

Electricity benchmarks

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
	2019/20		2020/21		2021/22		2022/23		2023/24	
CBD leased	172	215	111	218	136	213	139	245	134	245
CBD owned	157	226	102	214	108	213	126	227	129	227
CBD all buildings	161	222	105	216	117	213	130	234	131	234
Non-CBD leased	67	219	56	219	93	219	85	231	82	231
Non-CBD owned	92	226	66	214	82	213	81	227	75	247
Non-CBD all buildings	91	225	65	226	82	218	81	245	75	245
All leased	164	216	106	218	134	214	136	241	131	241
All owned	132	226	87	220	97	216	107	240	106	240
All buildings	138	223	91	221	106	216	113	240	112	240

For the reporting period, annual electricity consumption per square metre (kWh/m²/pa) decreased by 0.9%, from 113kWh/m²/pa to 112kWh/m²/pa. This reduction demonstrates continued performance below the private sector benchmarks of 240kWh/m² for the years 2022/23 and 2023/24.

Water benchmarks

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
	2019/20		2020/21		2021/22		2022/23		2023/24	
CBD leased	0.88	0.68	0.52	0.42	0.80	0.61	0.75	0.82	0.90	0.89
CBD owned	0.44	0.59	0.37	0.52	0.44	0.56	0.47	0.64	0.47	0.82
CBD all buildings	0.55	0.59	0.41	0.45	0.55	0.60	0.55	0.70	0.59	0.84
Non-CBD leased	0.87	0.84	0.66	0.64	1.36	1.20	1.11	1.18	0.75	0.83
Non-CBD owned	0.55	0.66	0.40	0.36	0.50	0.61	0.63	0.70	0.69	0.96
Non-CBD all buildings	0.57	0.68	0.41	0.39	0.53	0.69	0.65	0.75	0.69	0.94
All leased	0.88	0.72	0.54	0.48	0.83	0.81	0.77	0.93	0.89	0.87
All owned	0.48	0.63	0.38	0.43	0.46	0.59	0.53	0.68	0.56	0.90
All buildings	0.56	0.63	0.41	0.43	0.54	0.65	0.58	0.73	0.63	0.90

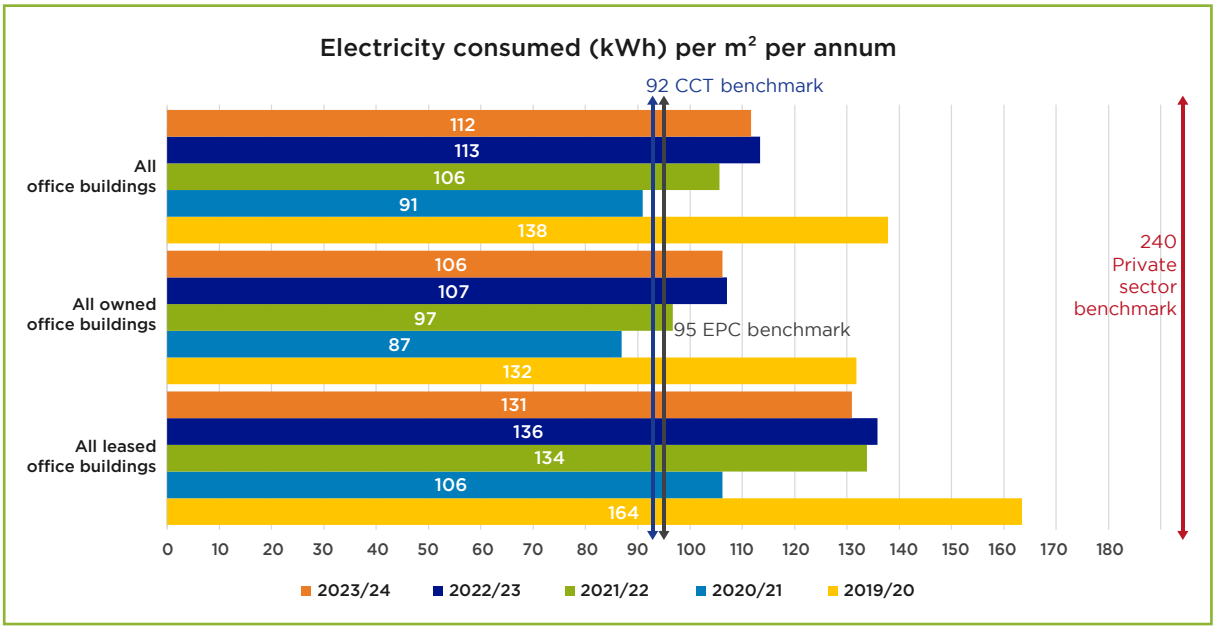
Water consumption increased by 8.6% compared to consumption during the previous period, reaching 0.63kL/m²/pa. This rise is consistent with the increased use of office space as more staff return to the workplace after the pandemic. Similarly, the private sector benchmark also saw a rise of 23.3%, climbing from 0.73kL/m²/pa to 0.90kL/m²/pa.

Electricity

Electricity consumption experienced a slight decrease of 0.9% over the past year, falling from 113kWh/m²/pa in 2022/23 to 112kWh/m²/pa in 2023/24. The WCG portfolio continues to outperform the private sector electricity consumption benchmark, which remained unchanged at 240kWh/m²/pa for 2023/24.

In addition, the City of Cape Town's office building sample of 32 buildings demonstrated a 1.1% reduction in electricity usage, with the City's office portfolio recording a consumption of 92kWh/m²/pa. This performance surpasses the WCG portfolio performance by approximately 17.9%.

When compared to the EPC benchmark for Climate Zone 4, set at 95kWh/m² for G1 category buildings, the EPC's performance was better than the WCG portfolio by 15.2%. By comparison, the CCT's performance was better than the benchmark by 3.2%.

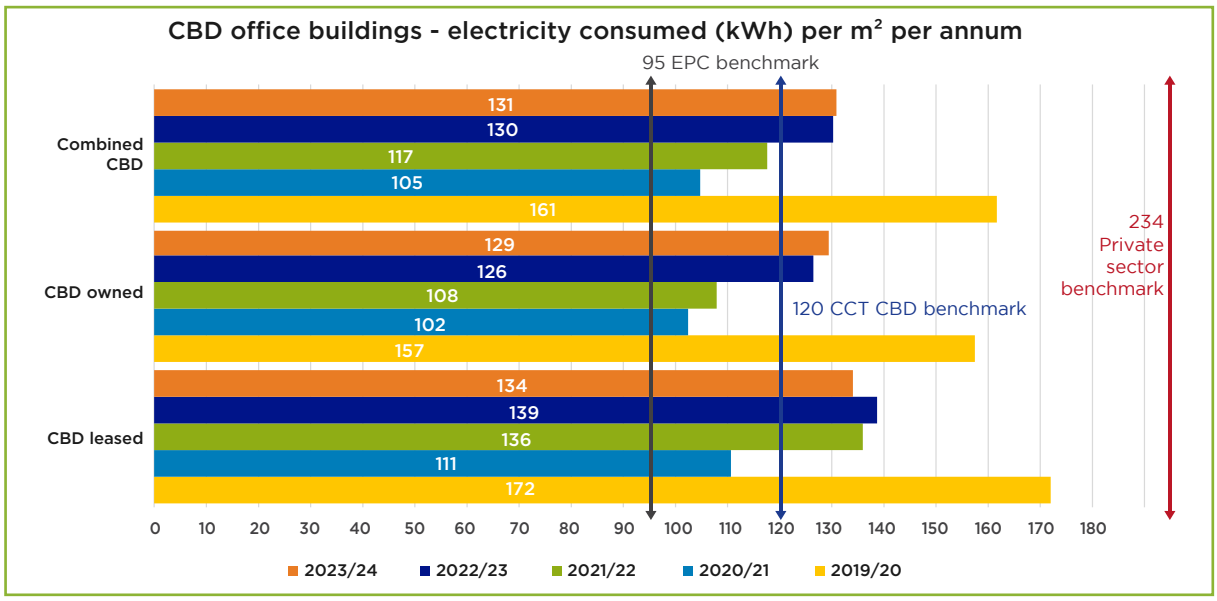


In the 2023/24 reporting period, the WCG-owned buildings portfolio achieved an electricity consumption rate of 106kWh/m²/pa, demonstrating 19.1% greater efficiency compared to leased buildings, which

had a consumption rate of 131kWh/m²/pa. The owned buildings portfolio saw a 0.9% reduction in consumption, decreasing from 107kWh/m²/pa to 106kWh/m²/pa. In contrast, the leased buildings portfolio improved by 3.7%, with consumption decreasing from 136kWh/m²/pa to 131kWh/m²/pa.

CBD electricity

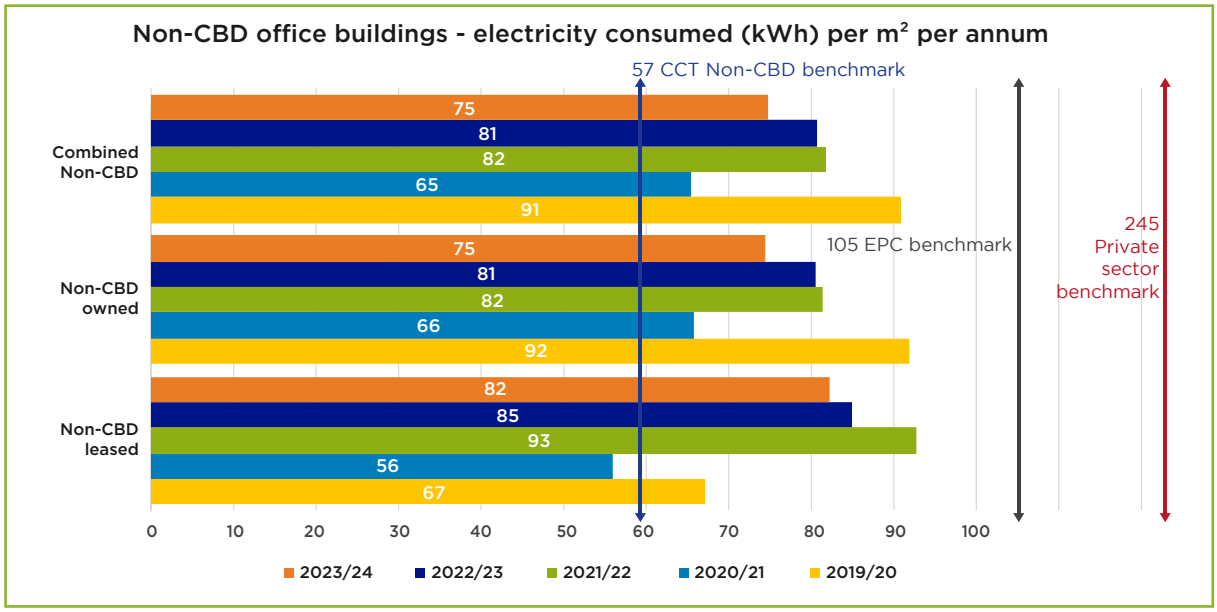
The electricity consumption of the CBD portfolio increased by 0.8% during the reporting period, rising from 130kWh/m²/pa in 2022/23 to 131kWh/m²/pa. Notably, the WCG-leased buildings within this portfolio experienced a 3.6% improvement, reducing their consumption from 139kWh/m²/pa to 134kWh/m²/pa. WCG-owned buildings in the CBD portfolio, with a consumption of 129kWh/m²/pa, outperformed by 3.7% the WCG-leased buildings, which had a consumption of 134kWh/m²/pa. However, WCG-owned buildings experienced a significant increase in consumption in the CBD portfolio, rising by 2.4% from 126 kWh/m²/pa to 129 kWh/m²/pa.



The CBD portfolio, with a consumption rate of 131kWh/m²/pa, was more efficient than the private sector benchmark of 234kWh/m²/pa by over 44%. Notably, the private sector benchmark remained unchanged throughout the reporting period.

In contrast, the CCT CBD portfolio benchmark was set at 120kWh/m²/pa, outperforming the WCG CBD portfolio benchmark of 131kWh/m²/pa by 8.4%. The combined CCT CBD benchmark remained stable at 120kWh/m²/pa for 2023/24.

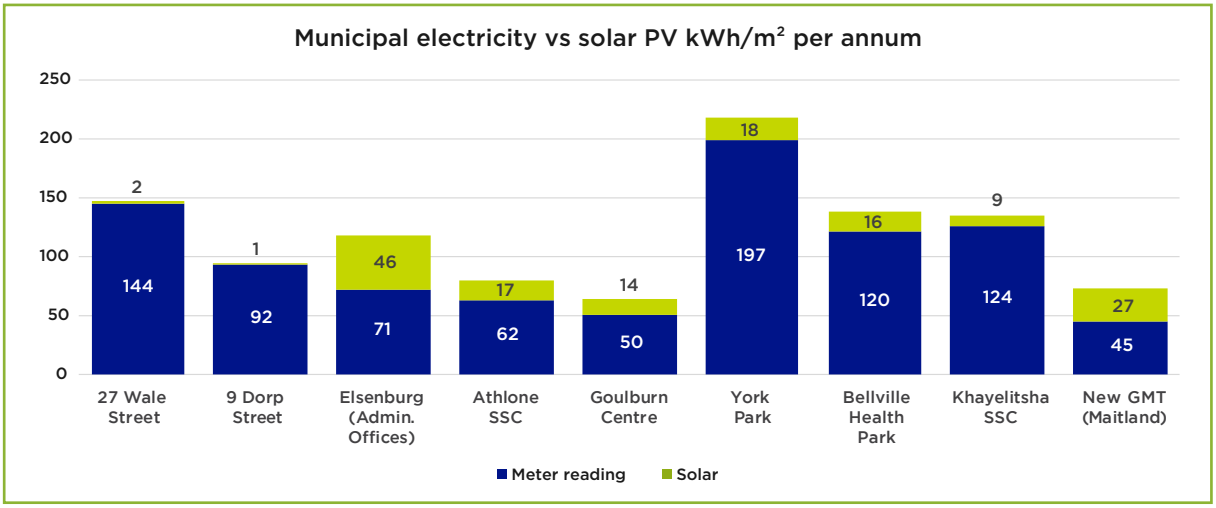
Non-CBD electricity



During the reporting period, electricity consumption in non-CBD owned buildings decreased by 7.4%, from 81kWh/m²/pa to 75kWh/m²/pa. These non-CBD owned buildings outperformed the non-CBD leased properties, which had a consumption rate of 82kWh/m²/pa, by 8.5%.

The non-CBD buildings portfolio demonstrated significant efficiency, surpassing both the private sector benchmark of 245kWh/m²/pa and the EPC benchmark of 105kWh/m²/pa. However, compared to the CCT non-CBD buildings benchmark of 57kWh/m²/pa, the WCG combined non-CBD buildings portfolio was 24% less efficient, with a consumption rate of 75kWh/m²/pa.

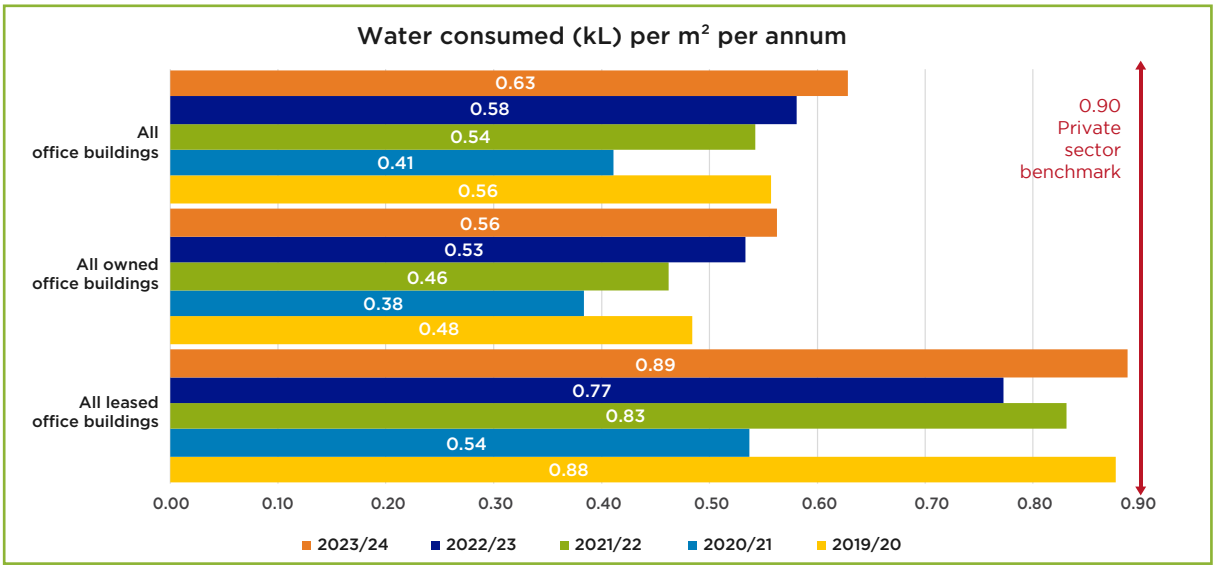
Energy consumption – solar photovoltaic and municipal electricity consumption



The leading buildings in solar electricity production are as follows: Elsenburg Administration Offices, which generate 39.4% of their electricity from solar energy, and the Government Motor Transport building in Maitland, with a solar generation rate of 37.8%. Additionally, the Goulburn Centre and Athlone Shared Services Centre (SSC) each generate 22.4% of their electricity from solar. It should be noted that solar electricity production at 9 Dorp Street has been constrained due to storm damage affecting the system.

Water

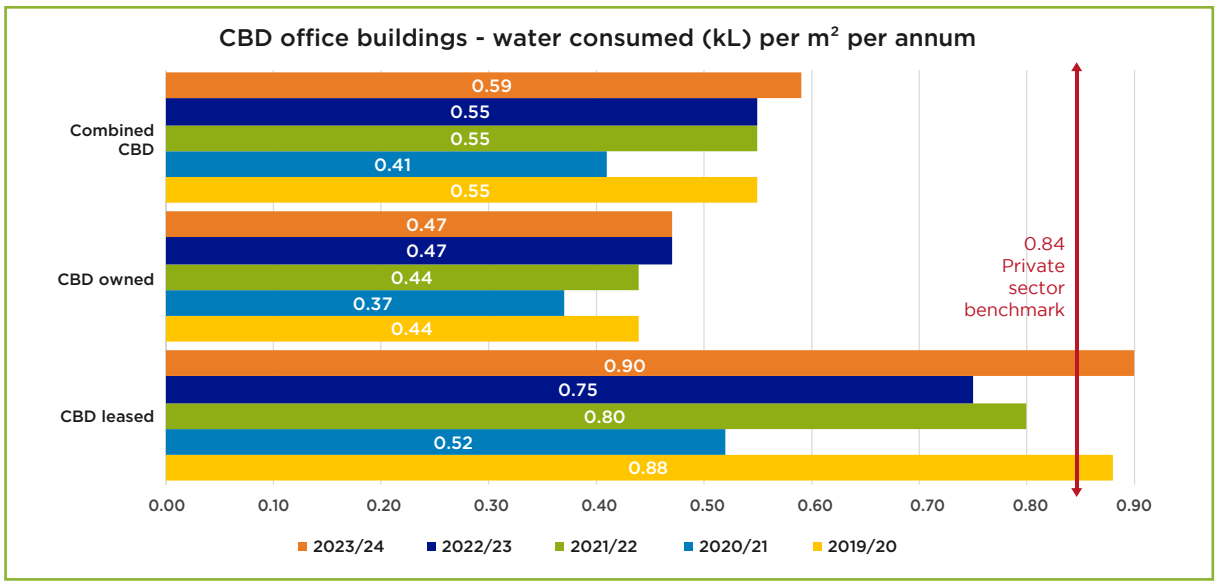
During the 2023/24 reporting period, water consumption across the portfolio increased by 8.6%, rising from 0.58kL/m²/pa to 0.63kL/m²/pa. Despite this increase, the portfolio continues to outperform the private sector benchmark, which is 0.90kL/m²/pa. It is noteworthy that the private sector benchmark showed a significant increase of 23.3% during the same period, rising from 0.73kL/m²/pa to 0.90kL/m²/pa.



In terms of comparative performance, owned buildings achieved a water consumption rate of 0.56kL/m²/pa, significantly outperforming leased buildings, which consumed 0.89kL/m²/pa. This represents a notable efficiency advantage of 37.1% for owned buildings over leased properties.

During the reporting period, water consumption in the leased buildings portfolio increased by 15.6%, rising from 0.77kL/m²/pa to 0.89kL/m²/pa.

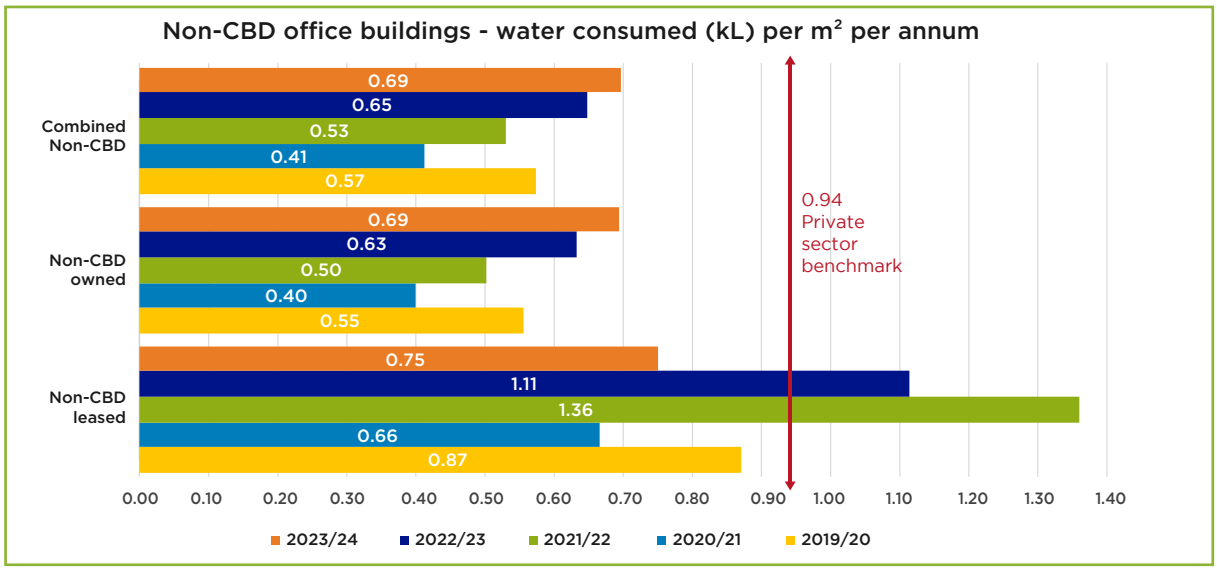
CBD water



During the reporting period, water consumption in the CBD buildings increased from 0.55kL/m²/pa to 0.59kL/m²/pa. Despite this increase, the CBD buildings' portfolio continued to exceed the private sector benchmark of 0.84kL/m²/pa by 29.8%.

Among the various portfolios, the CBD owned buildings demonstrated the highest water efficiency, maintaining a stable consumption rate of 0.47kL/m²/pa since the 2022/23 period. This performance significantly outpaced the leased buildings' portfolio, which recorded a consumption rate of 0.90kL/m²/pa, resulting in a substantial efficiency advantage of 47.8%.

Non-CBD water

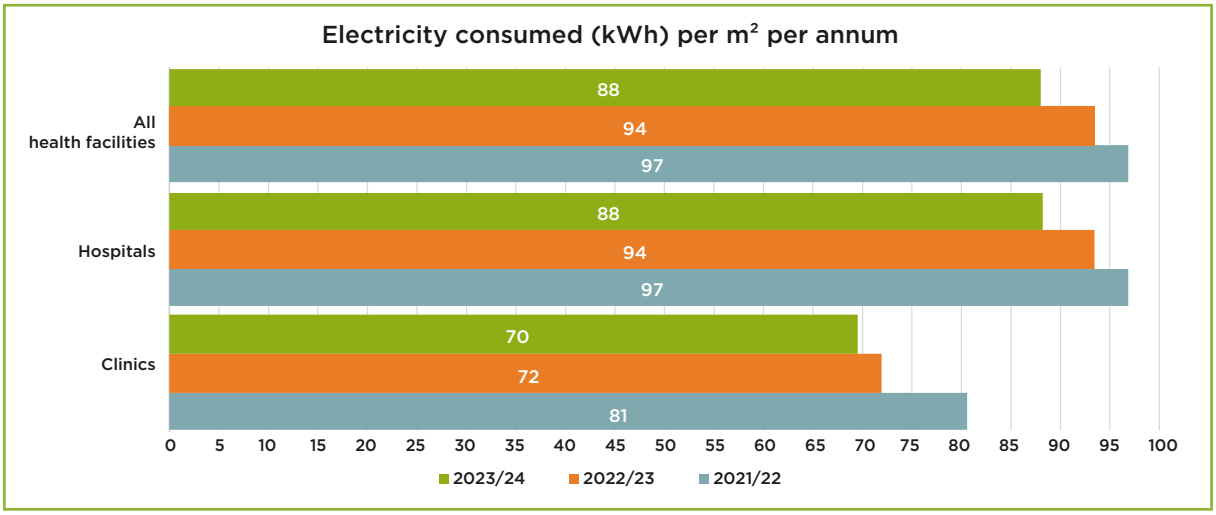


The non-CBD leased building portfolio demonstrated a significant reduction in water consumption, decreasing by over 32.4% during the reporting period, from 1.11kL/m²/pa to 0.75kL/m²/pa. Furthermore, the non-CBD owned buildings' portfolio performed exceptionally, with a consumption rate of 0.69kL/m²/pa, significantly outperforming the industry benchmark of 0.94kL/m²/pa.

Health facilities

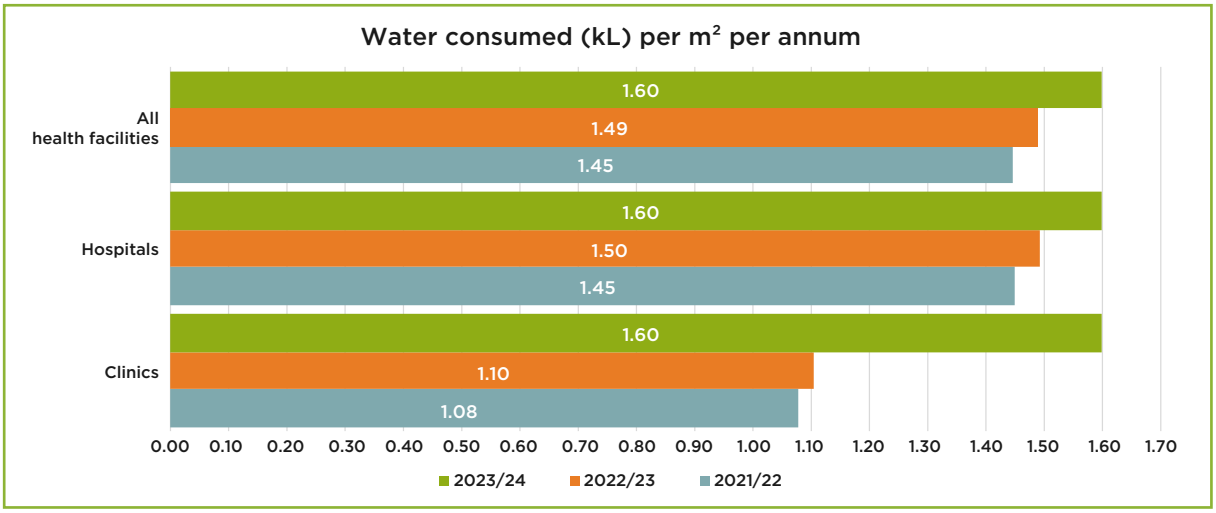
This year, the WCG significantly expanded the scope of its environmental performance assessment for health facilities. The addition of 12 new facilities has increased the total to 34, representing a 54.5% growth. This expanded group includes 21 hospitals, with sizes ranging from 1 041m² to 365 210m², and 13 clinics, varying from 150m² to 730m². For each newly incorporated facility, the WCG meticulously compiled three years of data and plans to continue growing this reporting portfolio in the future. This initiative underscores the WCG's commitment to enhanced transparency and comprehensive performance reporting. With the expanded dataset, the WCG recalculated the data for the reporting period to establish a new annual benchmark figure, providing a more accurate representation of the updated sample.

Health facilities' electricity consumption



Throughout the reporting period, all health facilities demonstrated improvements in energy efficiency. Overall energy consumption decreased by 6.4%, from 94kWh/m²/pa to 88kWh/m²/pa. Clinics reduced their consumption from 72kWh/m²/pa to 70kWh/m²/pa, reflecting a 2.8% improvement, while hospitals also showed enhanced efficiency with a 6.4% reduction in consumption from 94kWh/m²/pa to 88kWh/m²/pa.

Health facilities' water consumption



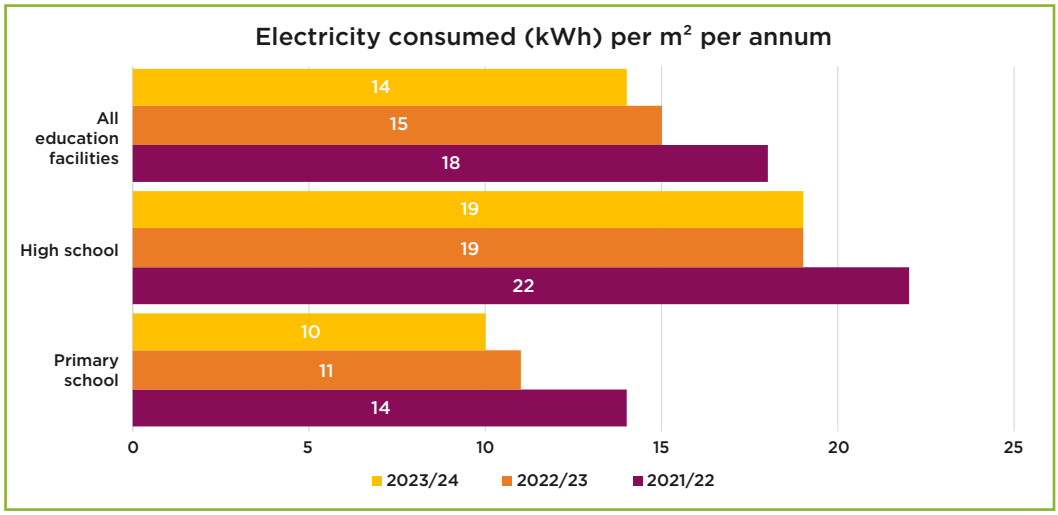
During the reporting period, health facilities exhibited an average water consumption rate of 1.60kL/m²/pa, indicating an increase in overall water use. Clinics experienced the most significant increase, with water consumption rising from 1.10kL/m²/pa to 1.60kL/m²/pa, marking a 45.5% increase. This rise is largely attributed to substantial consumption increases at De Doorns Clinic (94.5%), Klawer Clinic (46%), and Barrydale Clinic (29.7%). The reason for the increase in water usage is under investigation.

Education facilities

In this edition of the PER, the reporting sample of education facilities was expanded to include 60 institutions, comprising 37 primary schools and 23 high schools. These facilities vary in size from 1 180m² to 32 692m² and are distributed across the Western Cape.

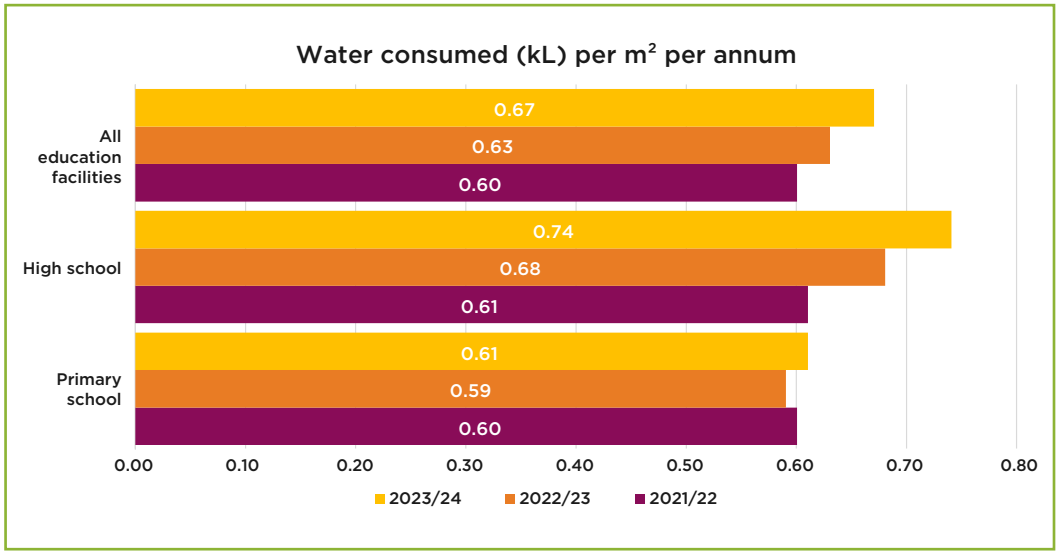
Education facilities' electricity consumption

The overall reporting portfolio of education facilities demonstrated improved energy efficiency during this reporting period, with electricity consumption decreasing from 15kWh/m²/pa to 14kWh/m²/pa, reflecting a 6.7% improvement in efficiency.

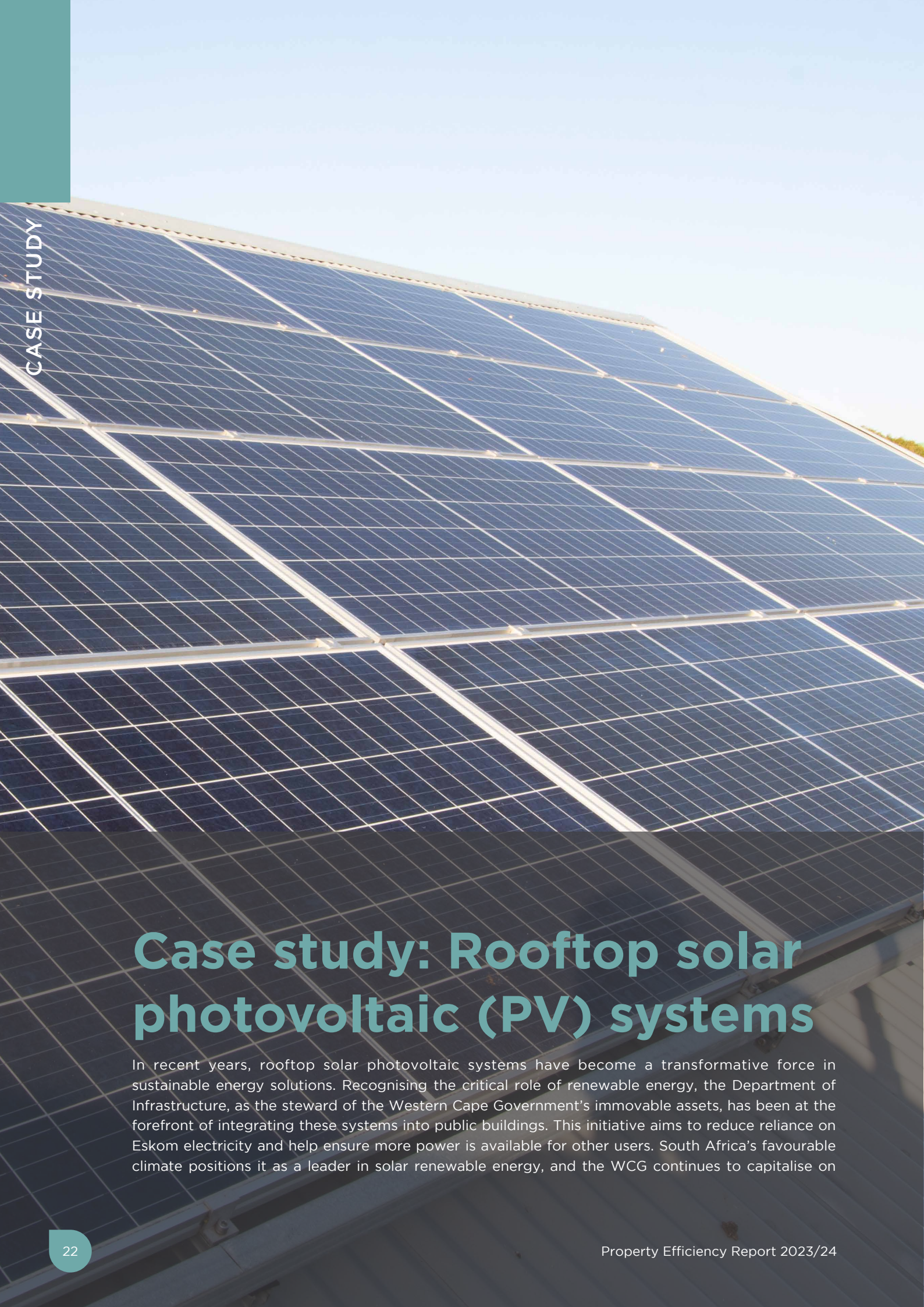


Primary schools exhibited notable progress, with energy consumption falling from 11kWh/m²/pa to 10kWh/m²/pa, marking a 9% increase in efficiency compared to consumption in the previous period. In contrast, energy consumption in high schools remained stable throughout the reporting period.

Education facilities' water consumption



Water consumption across all education facilities increased during the reporting period. High schools experienced a rise in water usage, with consumption levels increasing to 0.74kL/m²/pa from 0.68kL/m²/pa, reflecting an 8.8% decrease in efficiency. By contrast, primary schools showed only a slight increase of 3.4% in water consumption, rising from 0.59kL/m²/pa in 2022/23 to 0.61kL/m²/pa in 2023/24. Primary schools continue to lead in water efficiency in the education category.



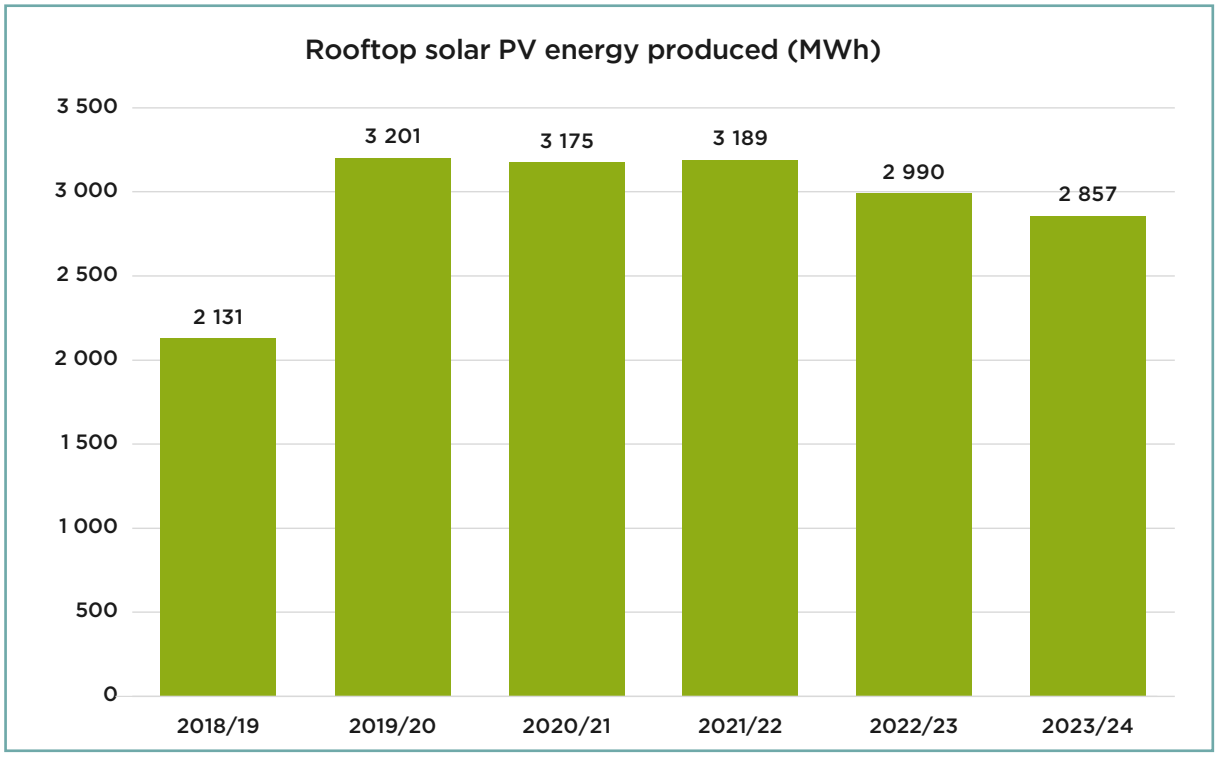
Case study: Rooftop solar photovoltaic (PV) systems

In recent years, rooftop solar photovoltaic systems have become a transformative force in sustainable energy solutions. Recognising the critical role of renewable energy, the Department of Infrastructure, as the steward of the Western Cape Government's immovable assets, has been at the forefront of integrating these systems into public buildings. This initiative aims to reduce reliance on Eskom electricity and help ensure more power is available for other users. South Africa's favourable climate positions it as a leader in solar renewable energy, and the WCG continues to capitalise on

this advantage through its ongoing rooftop solar energy programme. In the 2023/24 financial year, WCG's solar PV systems have generated 2 857MWh, highlighting the impact of these installations in advancing the province's sustainable energy objectives.

Rooftop solar PV - capacity and energy produced (MWh)										
Project/ building	Capacity (kWp)	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Movement	Change in generation of energy	Grand total
9 Dorp Street	52	61	9	11	74	73	21	↓	-52	333
Athlone SSC	109	177	172	175	170	27	110	↑	84	1 010
27 Wale Street	16	23	23	23	22	23	20	↓	-3	160
Alfred Street: Library & Cape Medical Depot	285	465	440	344	242	443	336	↓	-107	2 466
Bellville Health Park	75	125	122	122	120	110	107	↓	-3	900
Khayelitsha SSC	21	25	34	31	30	31	24	↓	-7	199
GMT Maitland	72	108	94	124	105	100	108	↑	7	684
Goulburn Centre	22	36	25	1	36	33	30	↓	-3	179
Cape Teaching and Learning Institute (CTLI)	425	449	719	732	733	719	672	↓	-47	4 025
Kromme Rhee	131	185	222	221	222	161	251	↑	90	1 261
Gene Louw	54	69	84	85	79	75	71	↓	-3	464
Elsenburg (Admin. Offices)	367	376	615	611	630	458	498	↑	40	3 189
Dassen Island	15	3	7	10	9	10	9	↓	-1	47
4 Dorp Street	29	15	37	43	44	13	0	↓	-13	151
York Park	120	15	154	108	148	118	122	↑	4	664
Artscape Building	430	0	444	489	461	532	424	↓	-108	2 350
Mossel Bay - Summer Heights	40	0	0	45	65	66	55	↓	-11	230
	2 262	2 131	3 201	3 175	3 189	2 990	2 857	↓	-133	18 310

Our systems have seen a remarkable increase in solar energy output, surging from 26MWh in 2016/17, reaching a high of 3 201MWh in 2019/20 to 2 857MWh in 2023/24. However, there has been a slight reduction in capacity and renewable energy production in 2023/24 due to specific challenges. At 9 Dorp Street, solar panels suffered damage from inclement weather, necessitating their removal and re-installation with reinforced structural support. Furthermore, the solar panels at 4 Dorp Street were permanently decommissioned due to storm damage. Solar output therefore decreased by 4.4% over the reporting period.

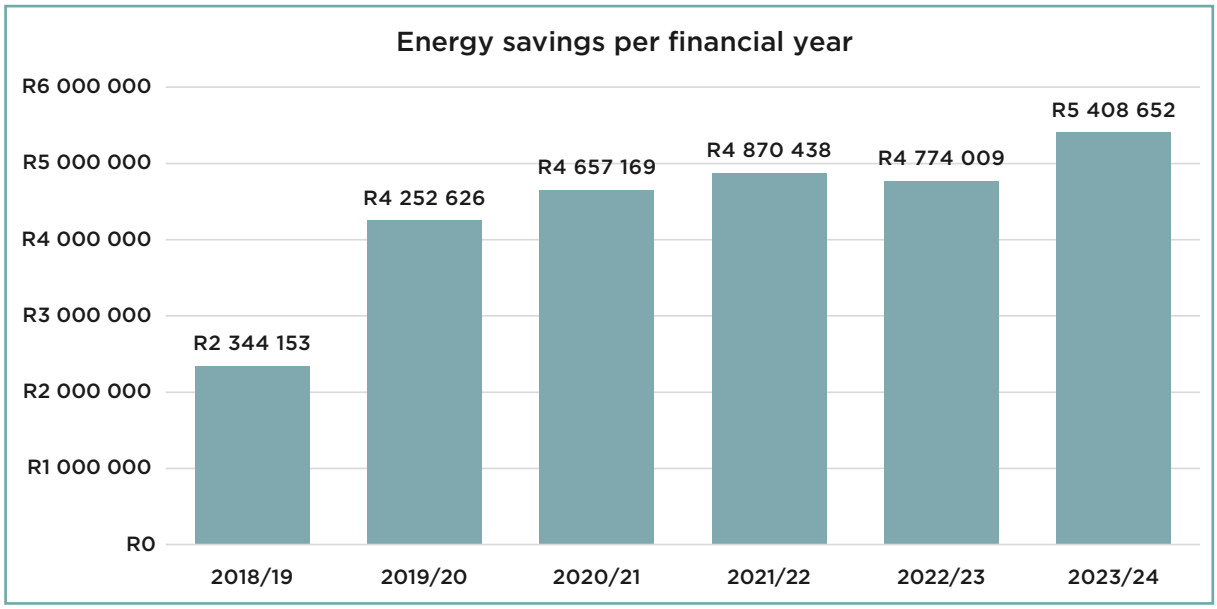


In this case study, 70.6% of the buildings analysed are located outside the Cape Town Central Business District, and the remaining 29.4% are situated within the CBD.

CASE STUDY

Rooftop solar PV - capacity and cost savings per financial year										
Project/ building	Capacity (kWp)	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Movement	Change in generation of energy	Grand total
9 Dorp Street	52	R103 855	R15 265	R19 391	R163 797	R143 637	R57 908	↓	-R85 730	R624 397
Athlone SSC	109	R221 276	R250 141	R262 720	R283 088	R19 645	R233 816	↑	R214 172	R1 467 458
27 Wale Street	16	R39 268	R44 528	R45 270	R50 594	R54 016	R56 374	↑	R2 358	R329 474
Alfred Street: Library & Cape Medical Depot	285	R511 790	R564 626	R512 738	R343 190	R632 926	R541 784	↓	-R91 142	R3 298 200
Bellville Health Park	75	R180 346	R203 755	R194 131	R232 507	R235 485	R258 964	↑	R23 479	R1 492 508
Khayelitsha SSC	21	R38 854	R64 052	R325 398	R64 156	R60 763	R45 279	↓	-R15 484	R631 037
GMT Maitland	72	R125 543	R159 717	R205 225	R183 005	R223 515	R232 932	↑	R9 417	R1 175 891
Goulburn Centre	22	R50 785	R47 895	R0	R73 364	R68 683	R73 269	↑	R4 585	R327 098
Cape Teaching and Learning Institute (CTLI)	425	R409 640	R939 481	R999 435	R1 094 799	R1 146 287	R1 264 740	↑	R118 454	R5 854 382
Kromme Rhee	131	R160 881	R255 145	R258 823	R264 650	R211 412	R478 494	↑	R267 082	R1 629 405
Gene Louw	54	R68 129	R104 282	R108 523	R108 915	R122 469	R121 911	↓	-R558	R634 230
Elsenburg (Admin. Offices)	367	R354 289	R707 743	R716 569	R874 240	R644 728	R942 594	↑	R297 866	R4 240 163
Dassen Island	15	R27 450	R72 221	R103 196	R105 750	R108 900	R128 796	↑	R19 896	R546 313
4 Dorp Street	29	R22 717	R63 775	R77 955	R87 983	R18 447	R0	↓	-R18 447	R270 876
York Park	120	R29 330	R201 500	R143 620	R197 886	R187 395	R191 920	↑	R4 525	R951 651
Artscape Building	430	R0	R558 500	R629 496	R655 161	R801 222	R699 379	↓	-R101 843	R3 343 758
Mossel Bay - Summer Heights	40	R0	R0	R54 679	R87 353	R94 478	R80 492	↓	-R13 986	R317 002
	2 222	R2 344 153	R4 252 626	R4 657 169	R4 870 438	R4 774 009	R5 408 652	↑	R634 643	R27 133 843

The cost savings generated by these systems have risen dramatically, from R32 420 in 2016/17 to R5 408 652 in 2023/24, culminating in a total savings of R27 133 843 over this entire period. Notably, there was a 13.3% increase in cost savings in 2023/24, despite challenges such as storm damage and necessary roof maintenance.



Chapter 2
Space utilisation

The Western Cape Government is focused on optimising its property space utilisation to achieve cost savings and enhance the quality of office environments, ultimately fostering productivity in the provincial administration. A critical metric in this goal is employment density, which gauges the average floor area allocated per full-time employee, providing insights into how effectively workspace is utilised.

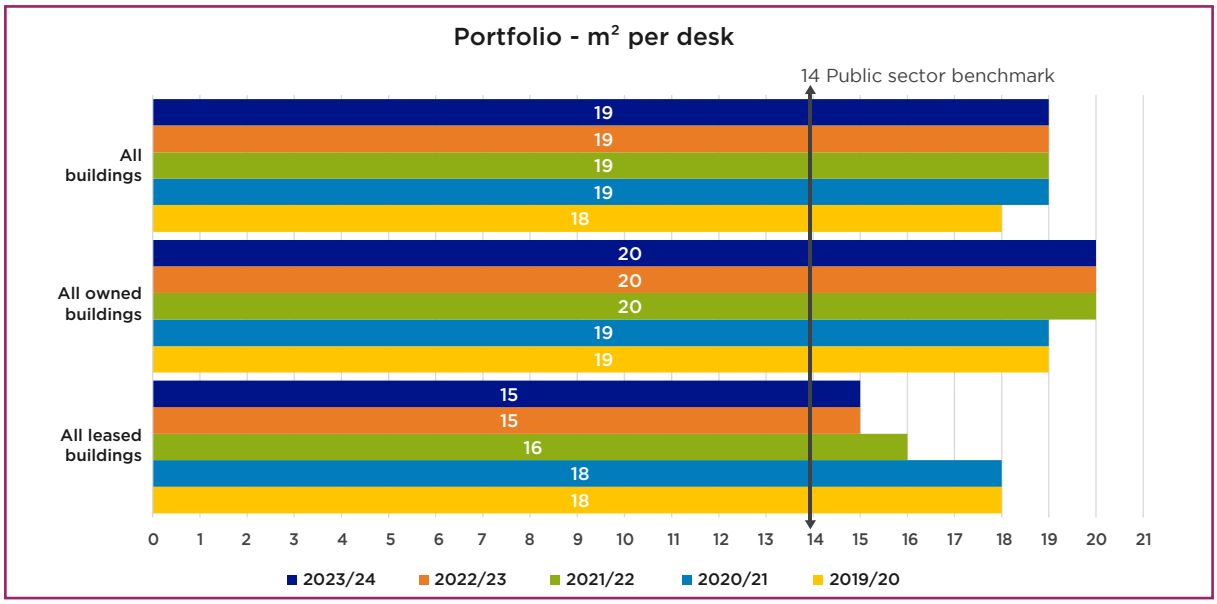
In the past three years, the work environment has undergone significant changes, largely due to the rise of post-pandemic remote working. Organisations have shifted from necessity-driven remote arrangements to more strategic approaches, re-evaluating their in-office and remote work balance. As technology continues to transform workplaces globally, leaders in both private and public sectors are rethinking real estate strategies. They are moving beyond traditional metrics like square metres per desk to more nuanced evaluations that consider industry-specific needs, such as the sizes of meeting rooms, storage requirements, and the layouts of executive and shared offices.

Throughout the reporting period, the WCG has maintained stable space efficiency, reflecting strategic adjustments to new workplace dynamics. The Department of Infrastructure aims to comply with space norms and standards, planning for an average of 15m² per employee. Given that the provincial government property portfolio represents one of the larger assets and expenses for the WCG, effective management is essential to prevent deterioration that could negatively impact the economy, service delivery, and safety.

In cases where standards are not met, the DOI addresses these issues through the Master Office Accommodation Plan (MOAP), which outlines both long- and short-term strategies. The MOAP aims to meet office needs, reduce reliance on leased properties, and enhance government functions within owned spaces. The focus is on minimising total occupancy costs while ensuring spaces meet operational requirements. Efficient space utilisation, particularly concerning workstations, is critical for promoting health, safety, and employee morale. Achieving these goals necessitates strong collaboration between the custodian and the users.

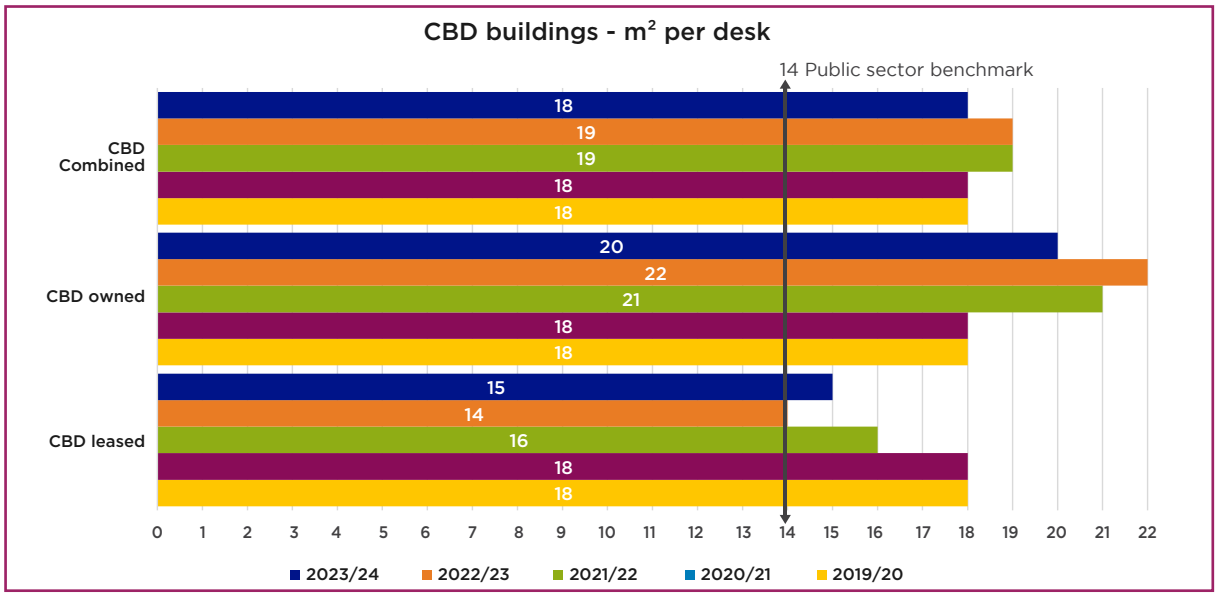
Currently, the portfolio's average desk space is 19m² per desk, which is 35.7% less efficient than the public sector benchmark standard of 14m² per desk, as reported by iOffice and Zippia. This benchmark has remained consistent over the past two years, highlighting the need for the WCG to enhance its space efficiency strategies moving forward.

Square metre per desk



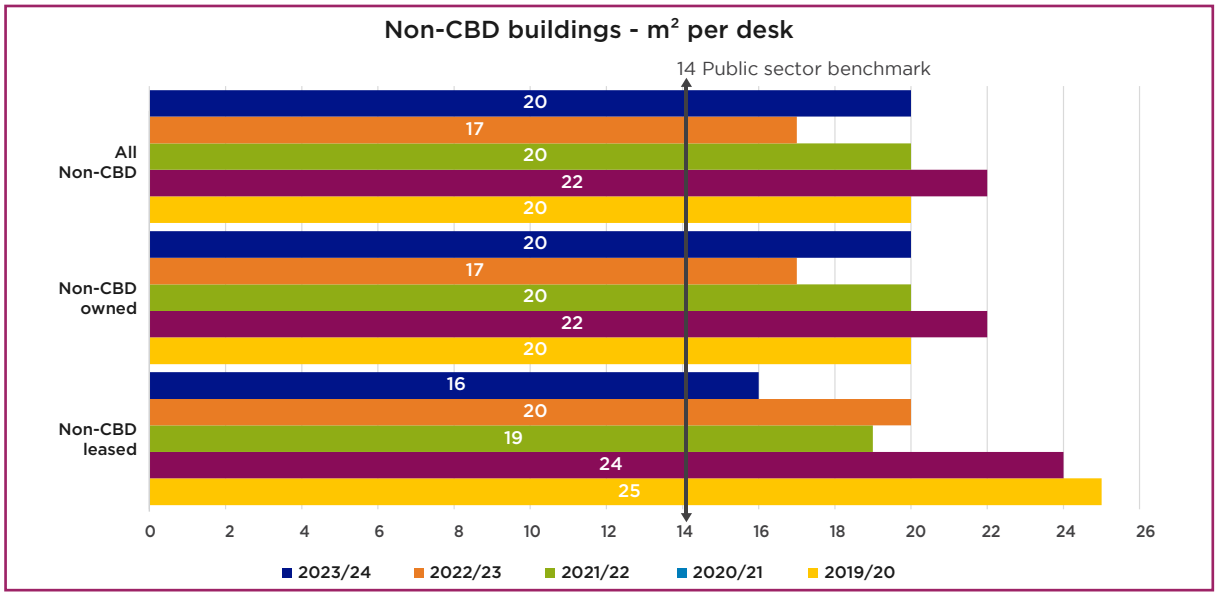
CBD buildings

In the WCG office portfolio, leased buildings in the CBD are the most space-efficient. However, there has been a slight decrease in their efficiency, with the average space per desk rising from 14m²/desk to 15m²/desk, representing a 7.1% decline in efficiency. Despite this decrease, leased CBD buildings continue to outperform CBD-owned buildings, which average 20m²/desk, by 25%. This superior performance is largely due to 1 North Wharf Square, which achieved a notable efficiency of 11m²/desk in 2023/24. CBD-owned buildings have seen a significant improvement in efficiency, reducing their average space per desk from 22m²/desk to 20m²/desk, reflecting a 9% enhancement.



Non-CBD buildings

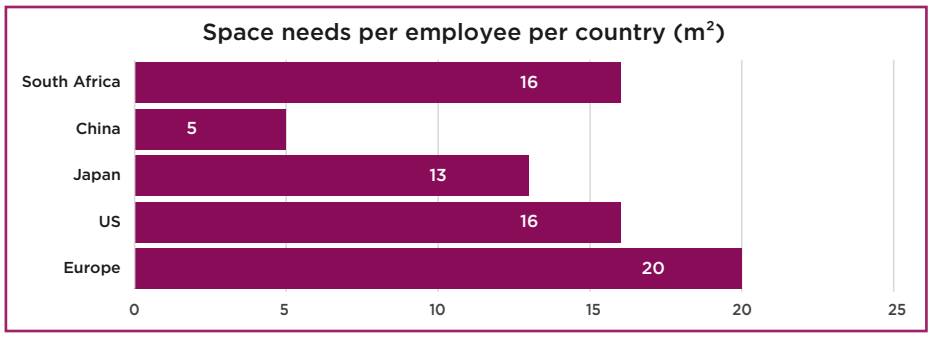
Non-CBD owned buildings reported an average space utilisation of 20m²/desk. The non-CBD leased properties demonstrated improved space efficiency, decreasing from 20m²/desk in 2022/23 to 16m²/desk in 2023/24, marking a 20% gain in efficiency. In contrast, non-CBD owned properties experienced a decrease in efficiency, with space utilisation increasing from 17m²/desk to 20m²/desk, representing a 17.6% decline.



Square metre per full-time equivalent

Globally, office space requirements per employee vary significantly. Typically, each full-time equivalent requires approximately 14m² of space, a standard that has remained stable over the past two years. European countries have the highest space requirements, averaging 20m²/FTE, while China has the lowest at 5m²/FTE. The United States and South Africa maintain a standard of 16m²/FTE across sectors.

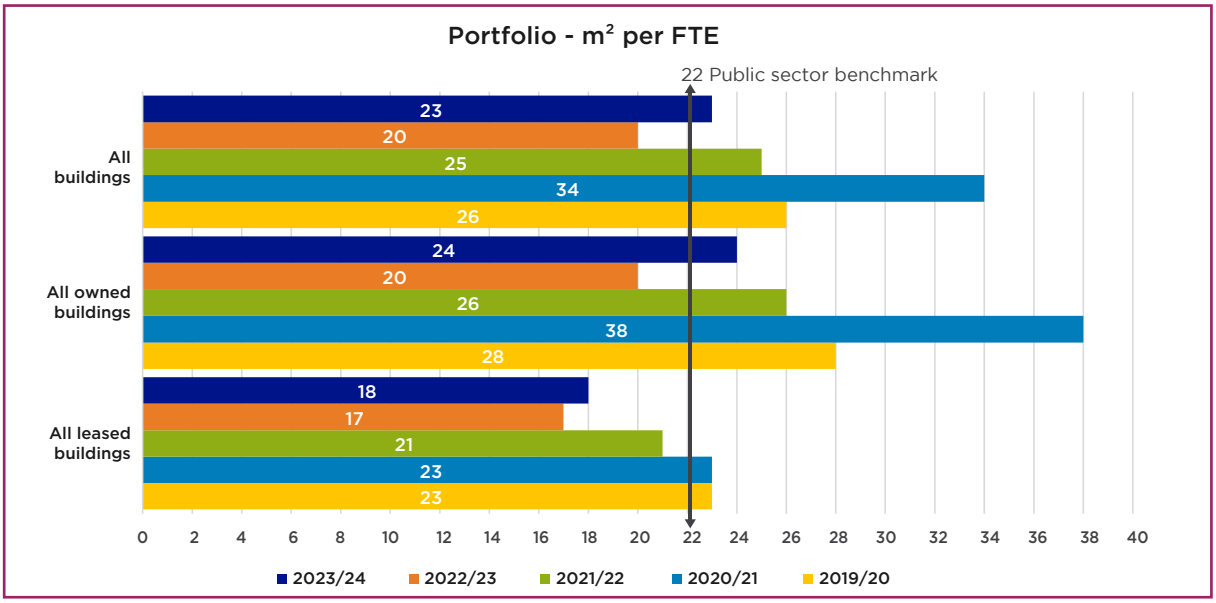
United States: office space per employee per sector (m²)	
Categories	Mean
Technology	14
Real Estate	17
Communication	24
IT	25
Insurance	26
Build environment	26
Financial	23
Federal Government	29
Legal	38
Law enforcement	22
Social services	22
Biotech and science	38



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

Office space requirements per employee can vary significantly due to factors such as geographical location, building density, building age, and cost considerations. Data from iOffice and Zippia indicate that different sectors in the United States have varying space needs. The federal government and legal sector typically require the most space, with estimated needs ranging from 29m² to 38m² per employee.

The WCG is considered a moderate to high-density user, with a stable benchmarking figure of 22m² per employee. This is similar to space requirements observed in sectors such as law enforcement and social services in the United States.

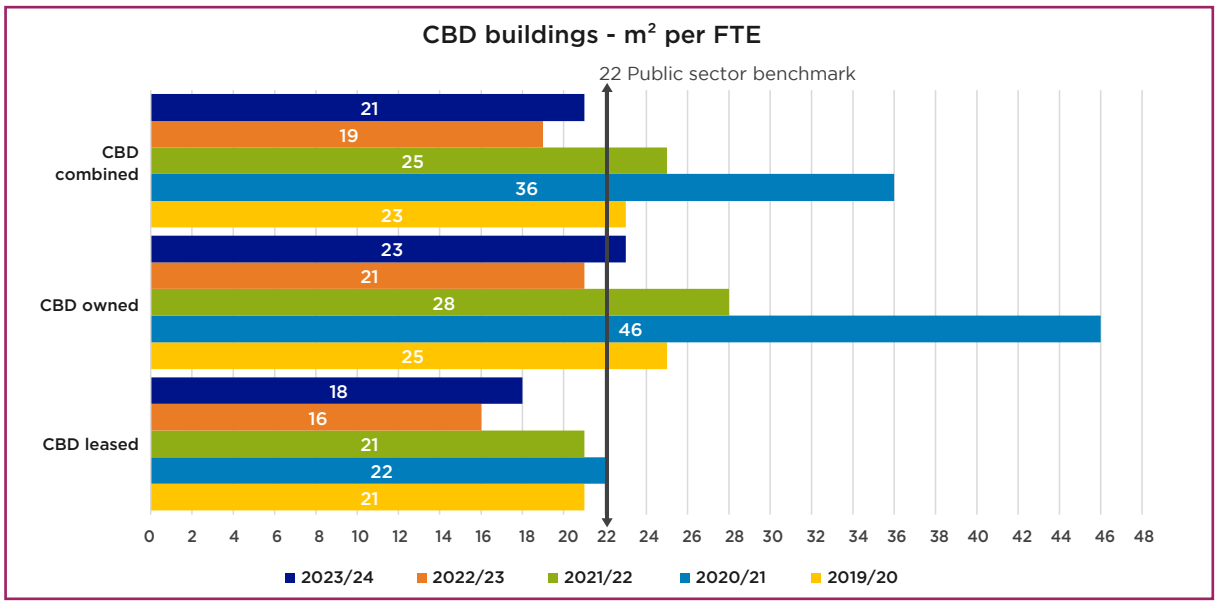


During the reporting period, the portfolio experienced a decrease in employee density, with space utilisation increasing from 20m²/FTE in 2022/23 to 23m²/FTE in 2023/24, indicating a 15% reduction in efficiency. Leased buildings emerged as top performers, maintaining an average of 18m²/FTE, a slight increase from 17m²/FTE in the previous period. In contrast, owned buildings saw a significant decline in efficiency, with space utilisation rising from 20m²/FTE to 24m²/FTE, reflecting a 20% decrease in efficiency.

CBD buildings

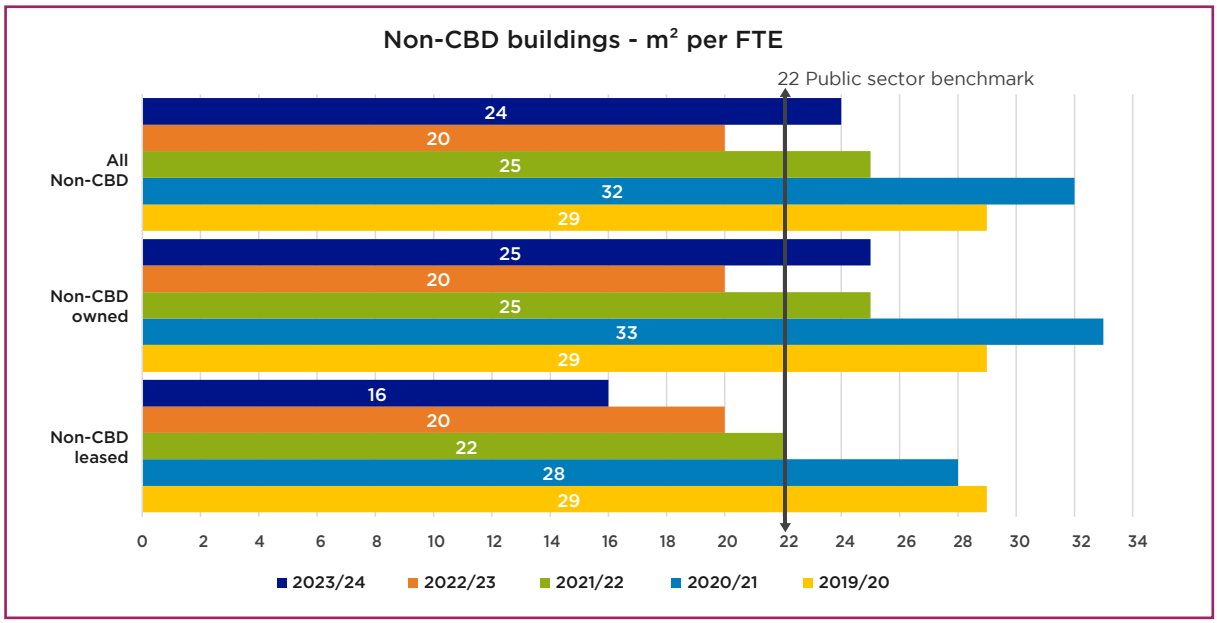
During the reporting period, employee density in all CBD buildings deteriorated. The overall employee density for CBD buildings increased by approximately 10.5%, rising from 19m²/FTE to 21m²/FTE. CBD

leased buildings experienced a decline in efficiency, with space utilisation worsening by 12.5%, from 16m²/FTE to 18m²/FTE.



Similarly, CBD-owned properties showed a comparable trend, with employee density increasing by 9.5%, moving from 21m²/FTE in 2022/23 to 23m²/FTE in 2023/24.

Non-CBD buildings



In contrast, employee density at non-CBD premises reverted to the levels observed in 2021/22, with space per person increasing to 24m²/FTE from 20m²/FTE, representing a 20% increase. Non-CBD owned properties experienced the most significant rise, with space utilisation increasing from 20m²/FTE to 25m²/FTE, a 25% increase. However, non-CBD leased buildings emerged as the top performers, improving efficiency with space utilisation decreasing from 20m²/FTE to 16m²/FTE, reflecting a 20% enhancement in efficiency.

CASE STUDY

Case study: Achieving a Green Star rating for Western Cape Government buildings

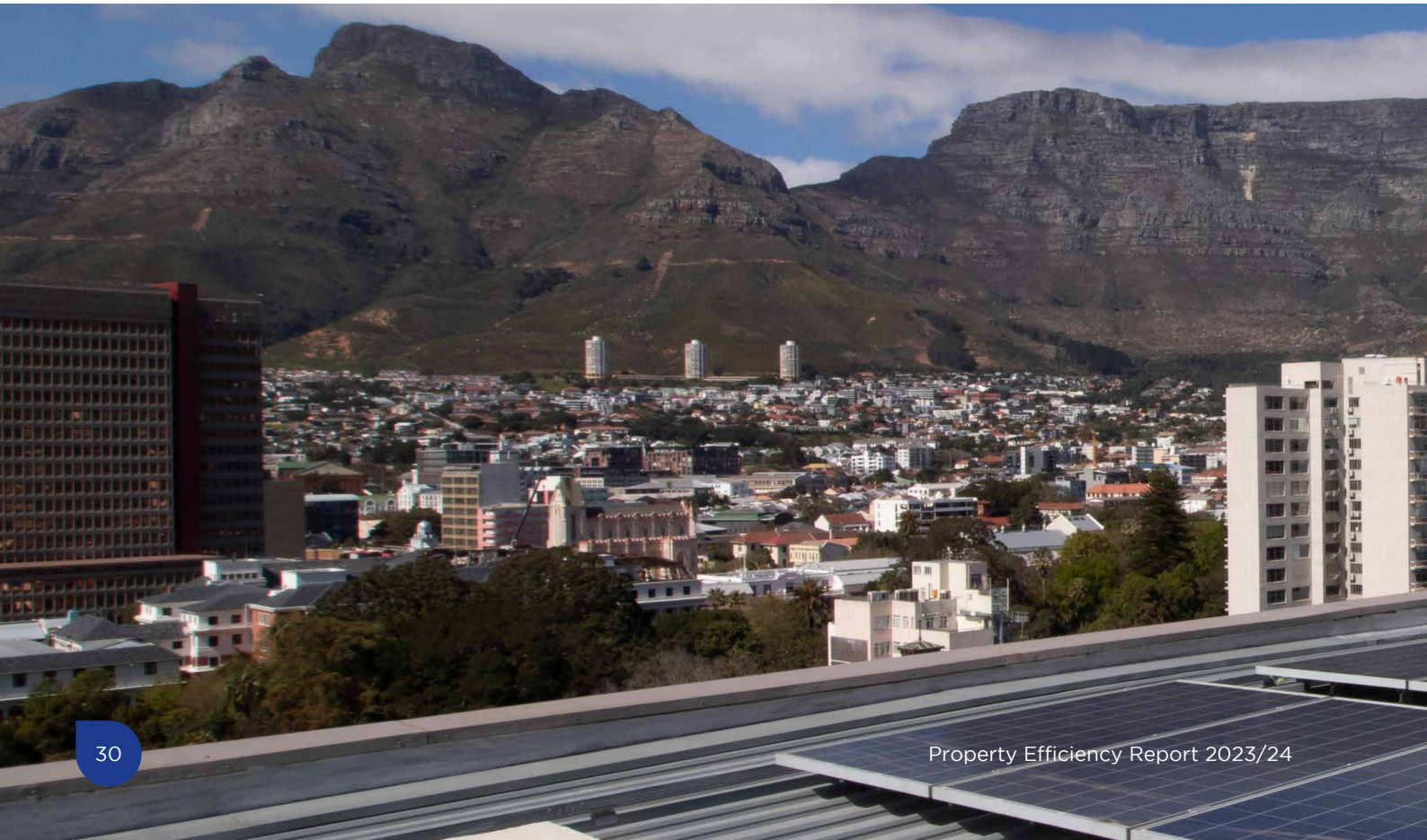
The Western Cape Government (WCG) Department of Infrastructure (DOI) is at the forefront of sustainable development, as demonstrated by recently obtaining 3-Star Green Star Existing Building Performance (EBP) ratings from the Green Building Council of South Africa (GBCSA) for 27 Wale Street and 1 & 3 Dorp Street respectively. The WCG has previously obtained a 4-Star Green Star EBP rating for 9 Dorp Street. This case study explores the motivations, challenges, and outcomes of the Department's work to secure a GBCSA EBP property rating for its office buildings in the Central Business District of Cape Town.

Motivation for Green Star rating

WCG is committed to enhancing energy and water efficiency across all its properties. The pursuit of a Green Star EBP rating aligns the Department's buildings with industry standards and highlights the provincial government's dedication to sustainability. The office buildings in Cape Town's CBD serve as a strategic starting point, given the precedents they have set for energy and water monitoring over several years. The GBCSA's Green Star EBP tool offers a robust framework for benchmarking these efforts against national standards, as well as promoting transparency and accountability.

Challenges

One of the primary obstacles to achieving the Green Star EBP rating was the voluntary basis on which DOI officials engaged in the certification process. Officials had to balance the rigorous demands of obtaining certification with their regular professional duties. To address this, select officials underwent training to become qualified GBCSA Accredited Professionals (APs), which allowed them to lead the certification efforts for the buildings. The dual responsibility of managing day-to-day tasks while pursuing certification highlighted both a challenge and an opportunity for the officials to apply their theoretical knowledge in practice.



Changes for future submissions

Going forward, the WCG plans to address specific areas that influenced the Green Star EBP rating. Notably, while water usage metrics were commendable, electricity usage remained high due to extensive load shedding and reliance on diesel generators. To mitigate this, the ongoing modernisation of particular floors at 27 Wale Street includes installing energy-efficient lighting. The EBP tool's emphasis on proactive building management will see the addition of building user manuals, operations manuals, and maintenance schedules, as well as educational displays to promote conscientious energy and water use among building occupants.

Factors influencing rating outcome

Several key factors impacted the outcome of the GBCSA rating. Challenges in waste management included credit claims that arose due to centralised waste management practices across multiple buildings. Additionally, load shedding in 2023 led to increased generator use, adversely impacting energy scores. Nonetheless, the Department's sustainable procurement policy excelled in the materials category, while water management was bolstered by water-saving installations and a black-water recycling plant at 1 & 3 Dorp Street.

Steps for future enhancements

To further enhance its EBP ratings, the WCG is prioritising improvements in building management and control. As energy efficiency offers the most potential for scoring, investments in energy-efficient infrastructure are considered crucial, albeit being costly. Meanwhile, the Department plans to update its policies to align cleaning equipment and materials with its green procurement policy, thereby boosting scores in the green cleaning category. Introducing localised green leasing agreements among directorates to promote recycling and efficient resource use is also under consideration.

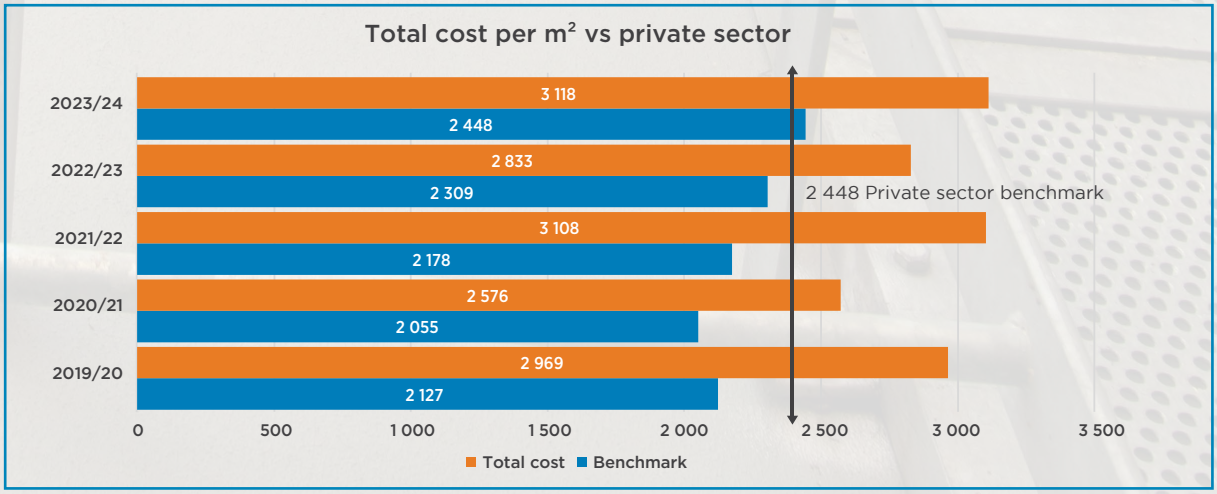
In conclusion, the WCG's pursuit of a Green Star EBP ratings underscores its commitment to sustainability and exemplifies leadership in public sector environmental stewardship. Despite challenges, the DOI's strategic approach to managing existing resources efficiently and enhancing infrastructure lays a strong foundation for future improvements, attesting to its dedication to a greener future.

Chapter 3

Performance measurement cost

Urbanisation and the economic importance of major cities drive significant business activity and investment in South Africa, leading to increased demand for new commercial projects and office spaces. There is a notable trend toward redeveloping older buildings, upgrading them to modern sustainability and efficiency standards, often with the integration of smart technologies. Despite facing economic challenges, real estate investment persists, particularly in strategically important areas and sectors experiencing growth. The rising interest in sustainable construction further catalyses new projects and refurbishment efforts to align with green building standards. Additionally, government and private infrastructure investments, particularly in transport and logistics, are critical drivers of commercial space demand. While demand and investment are subject to fluctuations based on economic conditions, policy shifts, and global trends, the overarching momentum towards construction and redevelopment is pronounced throughout South Africa. According to research by Serendipityremix, the private sector benchmark for performance management costs has increased by 6%, moving from R2 309/m² to R2 448/m² over the reporting period.

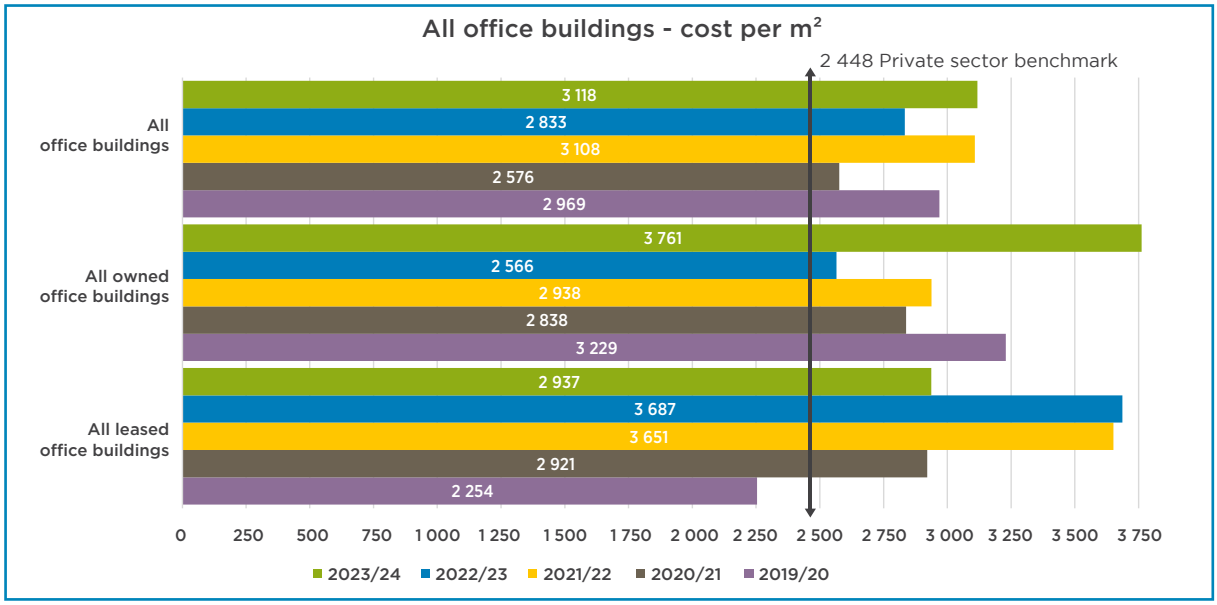
The Western Cape Government acknowledges the critical importance of continued investment in its real estate portfolio. The cost of occupying office space in the WCG's study portfolio has risen by 10.1%, escalating from R2 833/m² in the 2022/23 fiscal year to R3 118/m² in 2023/24. This increase is primarily attributed to essential capital and scheduled maintenance costs consisting of emergency repairs prompted by water damage, modernisation efforts, service repairs, and adherence to occupational health, safety, and fire compliance standards.



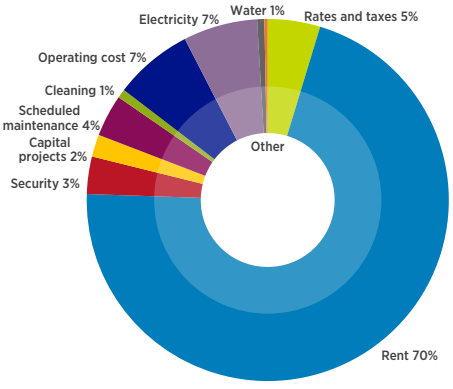
Notably, these costs exceed the private sector benchmark by 21.5%. The analysis reveals that capital project costs rose by 14.1% for all office buildings and scheduled maintenance increased by 13.6%. In contrast, scheduled maintenance costs surged by 50.4% for all leased office buildings, while capital project costs decreased by 28.4% over the reporting period. The increase in scheduled maintenance cost is primarily due to ongoing scheduled maintenance expenses at Oudtshoorn Shared Services Centre, which included installing a new backup generator.

All office buildings

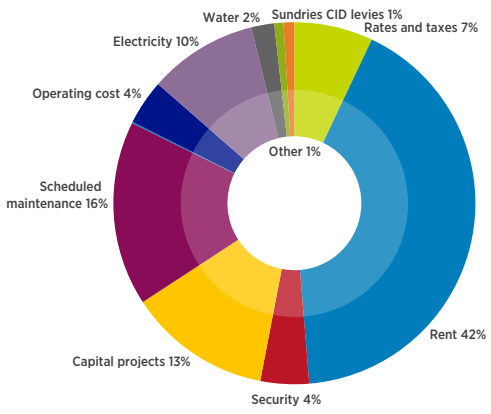
The cost per square metre for owned office buildings rose significantly from R2 566/m² in 2022/23 to R3 761/m² in 2023/24, positioning them as the most expensive part of the portfolio. Conversely, leased buildings experienced decreased costs, declining from R3 687/m² in 2022/23 to R2 937/m² in 2023/24, reflecting a reduction of approximately 20.3%. This shift highlights a notable change in cost dynamics between owned and leased office spaces.



Rental costs for leased buildings comprise 75% of total occupancy expenses, with a breakdown of 70% dedicated to rent and an additional 5% allocated to rates, taxes, and City Improvement District levies. Electricity and operating costs account for 7%, scheduled maintenance represents 4%, security expenses are 3%, and capital projects comprise 2% of the total costs. This allocation underscores the significant portion of expenses attributed to rent and operational necessities.



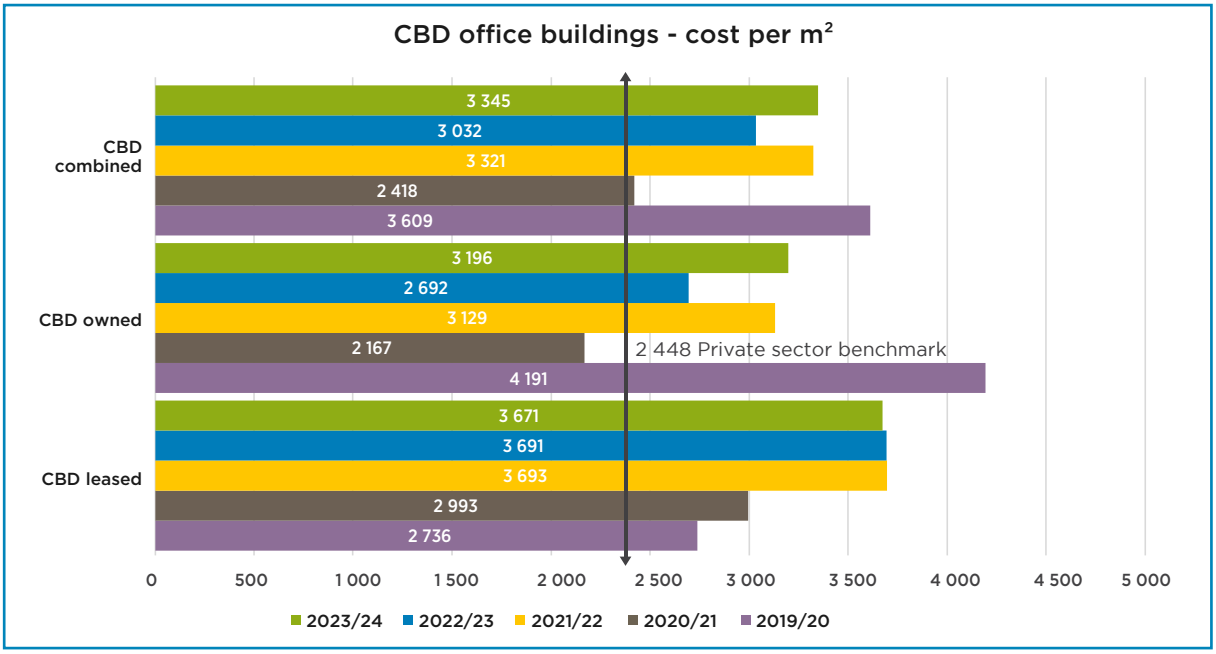
Occupancy cost breakdown
All leased office buildings



Occupancy cost breakdown
All owned office buildings

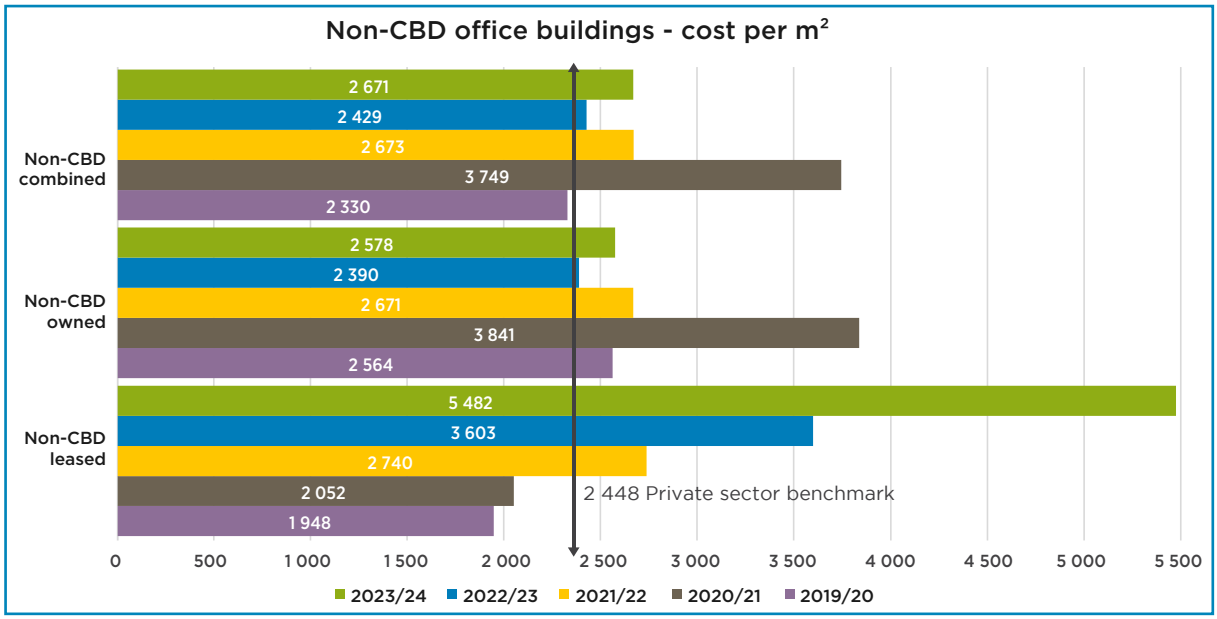
To calculate the annualised capital expenses for owned buildings, the WCG employed a methodology similar to that used for leased properties. This approach involved factoring in an estimated market rental rate, facilitating a direct comparison with leased spaces and the private sector benchmark. Annual operating expenses encompass rates and taxes, support services, repair and maintenance, and management fees.

CBD office buildings



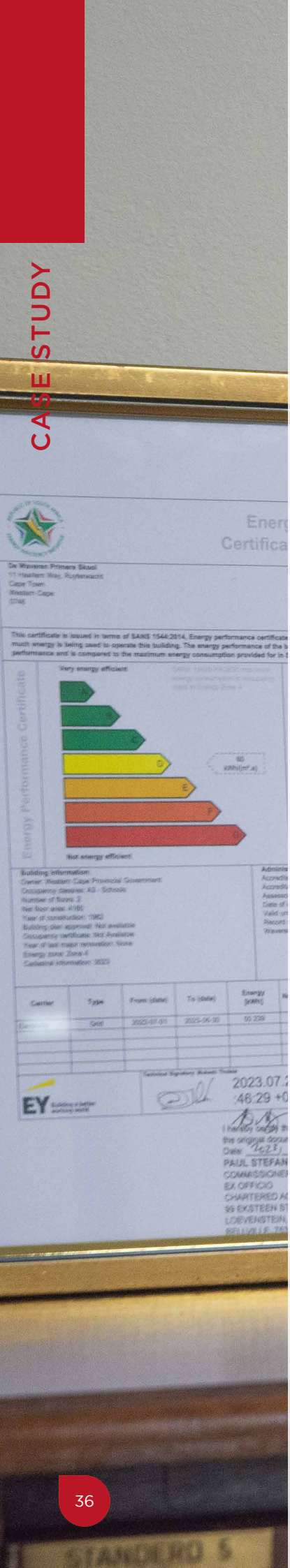
Operating costs for all CBD properties rose from R3 032/m² in 2022/23 to R3 345/m² in 2023/24, marking a 10.4% increase. Costs for CBD owned properties increased by 18.7%, from R2 692/m² to R3 196/m² during the reporting period. In contrast, CBD leased property costs remained relatively stable, with a slight decrease of 5.4% from R3 691/m² to R3 671/m².

Non-CBD buildings



The non-CBD combined properties' portfolio experienced an increase in operating costs, rising from R2 429/m² in 2022/23 to R2 671/m² in 2023/24. Costs for non-CBD owned properties grew by 7.9%, from R2 390/m² to R2 578/m². Additionally, non-CBD leased premises saw a substantial 52% cost increase, from R3 603/m² to R5 482/m², primarily due to ongoing scheduled maintenance expenses at Oudtshoorn Shared Services Centre which included the installation of a new backup generator.

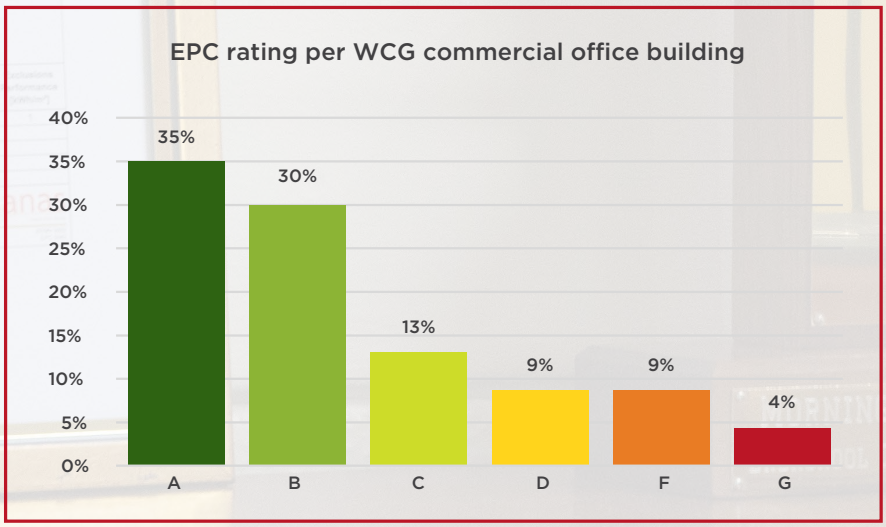
CASE STUDY



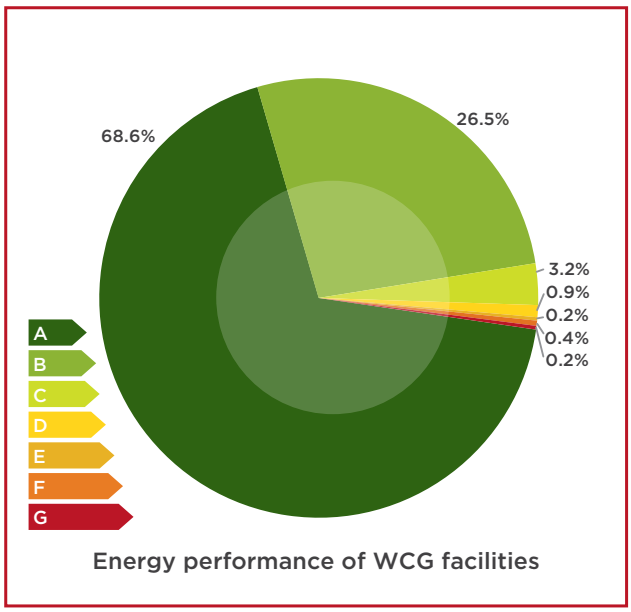
Case study: Western Cape Government energy performance

Buildings account for roughly 39% of global carbon emissions, with 28% originating from operational emissions and 11% from the production and use of construction materials, according to the World Green Building Council. As the 14th largest emitter of greenhouse gases, South Africa faces significant pressure to improve energy efficiency. The nation's Post-2015 National Energy Efficiency Strategy targets a 50% reduction in energy consumption for state-owned buildings and a 37% reduction for commercial properties by 2030. In pursuit of these goals, regulations issued on 8 December 2020 require energy performance certificates for specific non-residential buildings, with the compliance deadline set for 7 December 2025.

EPCs classify buildings from A (most efficient) to G (least efficient). Eligibility for compliance mandates that buildings have been operational for at least two years without significant renovations, primarily serve as places of instruction, theatrical and indoor sport or office space, and possess a net floor area exceeding 2 000m² for private buildings or 1 000m² for state-owned buildings. EPCs enhance awareness of energy inefficiencies, allow for efficiency comparisons amongst similar structures, and establish a baseline for monitoring improvements.



The Western Cape Government has engaged four inspection bodies to produce approximately 962 EPCs over three years. As of 17 September 2024, WCG had secured 808 EPCs, a significant increase from 115 in October 2023. This includes one EPC for the Artscape Theatre Complex (A1), one for Khayelitsha Hospital (E2, G1), 23 for commercial office buildings (G1), and 783 for education facilities (A3).



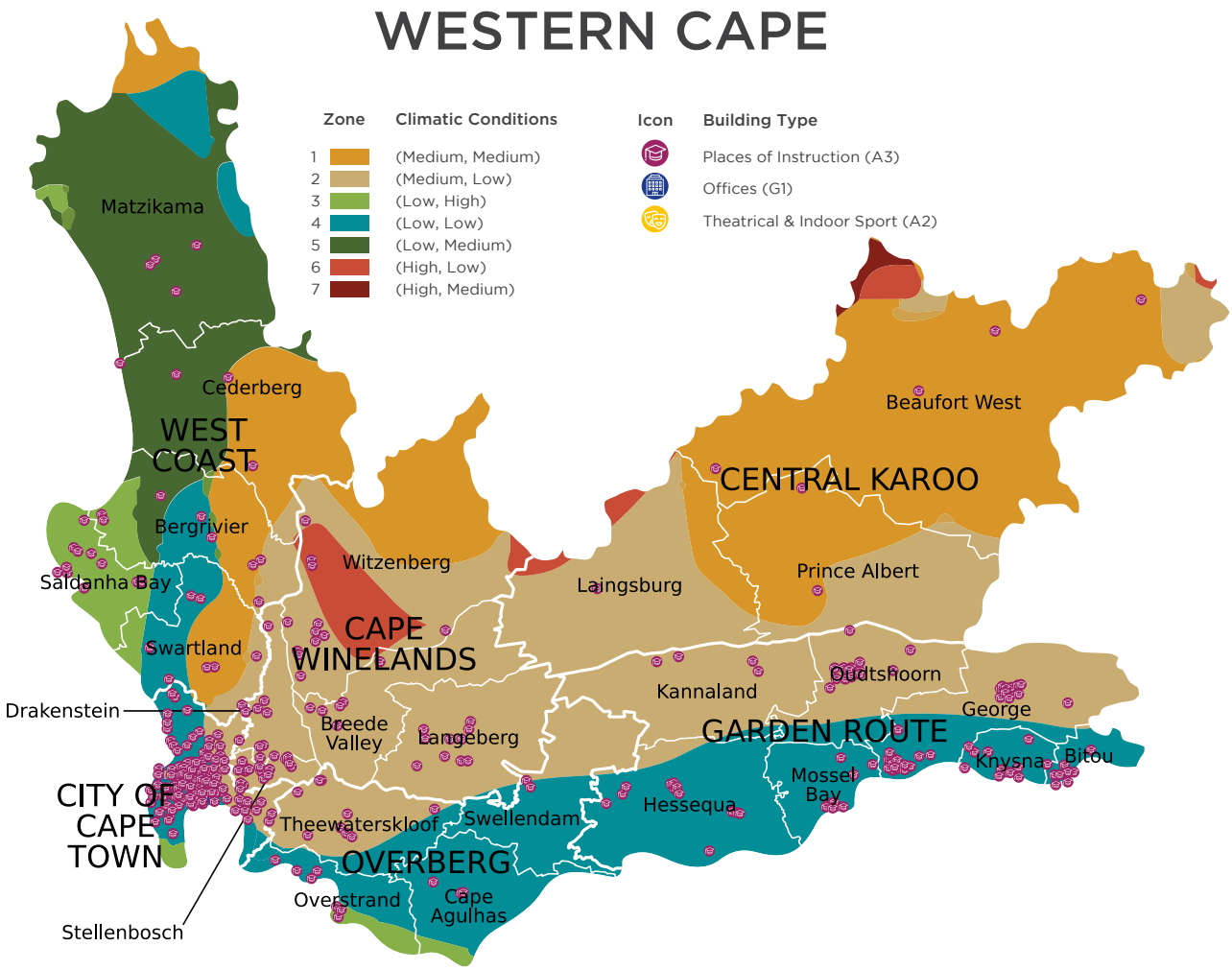
Energy performance of WCG facilities

Of the EPCs obtained, 68.2% reflect an A rating for energy performance, 27% a B rating, 3.2% a C rating, and 0.9% a D rating.

The top-performing A-rated office buildings include Swellendam SSC with a consumption of 4kWh/m², Khayelitsha SSC (19kWh/m²), Oudtshoorn Western Cape Education Department (WCED) & DOI (24kWh/m²), Hugenot Building (30kWh/m²), WCED North Office (34kWh/m²), and Bredasdorp SSC at 35kWh/m².

Among school facilities, Valpark Primary School leads with 0.38kWh/m², followed by Saambou Primary School (0.39kWh/m²), Uniondale Secondary School (0.40kWh/m²), Windermere Primary School (0.51kWh/m²), and Sid G Rule Primary School at 0.56kWh/m². Notably, Oakdale Agricultural School and York Park Shared Service have the highest average rating per EPC at 261kWh/m².

The WCG remains committed to meeting the 7 December 2025 deadline to obtain EPCs for the remainder of the specified building categories listed in the National Energy Act regulations. EPCs are pivotal in advancing sustainable building practices and in reducing the carbon footprint of government properties.



Chapter 4:

Portfolio overview

Portfolio by ownership 2023/24				
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 2023/24	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	18
CBD owned	86 971	10	23
Non-CBD leased	2 087	2	16
Non-CBD owned	62 531	17	25
Total	191 461	35	23
Exclusions 2023/24	5 392	2	
Total	196 853	37	

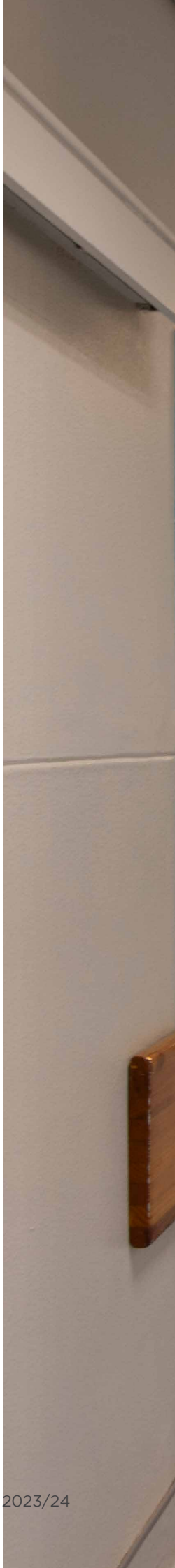
Office building name	Useable area m² 2023/24	Total cost	Total cost per FTE	Total cost per m²	Energy 2023/24 kWh/m²/ annum	Water 2023/24 kl/m²/ annum	Number of desks per m²	m² per FTE 2023/24
All buildings	191 461	R596 933 427	R70 161	R3 118	112	0.63	19	23
All leased buildings	41 959	R157 821 246	R65 350	R3 761	131	0.89	15	18
All owned buildings	149 502	R439 112 181	R72 068	R2 937	106	0.56	20	24
All CBD buildings	126 843	R424 316 247	R76 179	R3 345	131	0.59	18	21
CBD leased	39 872	R146 379 741	R63 949	R3 671	134	0.90	15	18
11 Leeuwen Street	1 726	R3 518 902	R32 582	R2 039	78	1.12	12	16
35 Wale Street	5 309	R12 173 174	R45 253	R2 299	105	-	17	20
The Box	6 160	R21 069 365	R75 248	R3 420	129	0.70	21	22
Protea Assurance	6 608	R16 721 852	R47 641	R2 531	73	1.16	19	19
Waldorf	9 621	R32 874 381	R71 311	R3 417	125	0.52	15	21
1 North Wharf Square	10 448	R60 022 066	R73 198	R5 745	240	1.15	11	13
CBD owned	86 971	R277 936 506	R84 711	R3 196	129	0.47	20	23
1 Dorp Street	3 362	R7 572 017	R34 894	R2 252	125	0.22	15	15
3 Dorp Street	1 800	R3 930 614	R45 179	R2 184	65	0.75	16	21
4 Leeuwen Street	1 791	R3 536 625	R34 673	R1 975	58	0.28	13	18
27 Wale Street	10 844	R25 049 988	R50 811	R2 310	144	0.24	17	22
4 Dorp Street	18 365	R65 822 246	R86 155	R3 584	133	0.14	20	24
7 & 15 Wale Street	19 790	R54 279 547	R132 067	R2 743	85	0.14	40	48
9 Dorp Street	14 964	R70 414 492	R83 628	R4 706	92	0.36	16	18
Hugenot Building	2 123	R3 500 526	R66 048	R1 649	29	0.16	36	40
Union House	5 721	R12 212 977	R43 155	R2 135	91	2.65	17	20
25 Alfred Street	8 211	R31 617 474	R1 090 258	R3 851	49	1.20	* 265	* 283
All Non-CBD buildings	64 618	R172 617 180	R58 753	R2 671	75	0.69	20	24
Non-CBD leased	2 087	R11 441 505	R90 806	R5 482	82	0.75	16	16
Eersterivier Soc. Serv	865	R1 869 370	R32 796	R2 161	171	0.70	15	15
Oudtshoorn SSC	1 222	R9 572 135	R138 727	R7 833	20	0.78	16	18
Non-CBD owned	62 531	R161 175 675	R57 317	R2 578	75	0.69	20	25
Oudtshoorn WCED & DTPW	1 950	R7 552 629	R222 136	R3 873	28	0.42	57	57
Elsenburg (Admin. Offices)	10 804	R23 806 376	R84 420	R2 203	71	0.41	33	38
Athlone SSC	6 557	R19 946 766	R90 257	R3 042	62	0.76	23	30
Bredasdorp SSC	2 894	R4 030 660	R403 066	R1 393	29	0.40	* 241	* 289
Goulburn Centre	2 213	R2 864 415	R22 205	R1 294	50	0.94	12	17
Mossel Bay SSC	1 810	R1 616 999	R23 779	R893	21	0.04	25	27
Paarl WCED	2 632	R19 128 333	R159 403	R7 268	57	-	22	22
Swellendam SSC	1 621	R2 403 715	R104 509	R1 483	1	0.88	62	70
WCED Central Office	1 902	R8 464 353	R28 693	R4 450	73	4.76	6	6
WCED North Office	3 726	R6 154 569	R31 084	R1 652	64	0.14	18	19
Worcester Soc. Serv	1 150	R3 477 432	R46 992	R3 024	77	0.09	14	16
Worcester WCED	4 324	R5 921 006	R34 626	R1 369	25	0.35	24	25
York Park	6 749	R10 520 098	R42 939	R1 559	197	0.34	23	28
Bellville Health Park	6 615	R9 899 422	R28 284	R1 496	120	0.88	18	19
Khayelitsha SSC	2 635	R25 202 861	R83 178	R9 565	124	0.78	8	9
Dan de Villiers SSC	1 006	R2 074 060	R66 905	R2 062	64	0.52	28	32
GMT Maitland	3 943	R8 111 980	R31 442	R2 057	45	1.19	15	15

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

* Excluded from the calculations

Health facility	Included		Excluded water	
	Size (m²)	No.	Size (m²)	No.
All clinics	5 219	13	433	1
All hospitals	885 692	21	33 666	3
Total	890 911	34	34 099	4

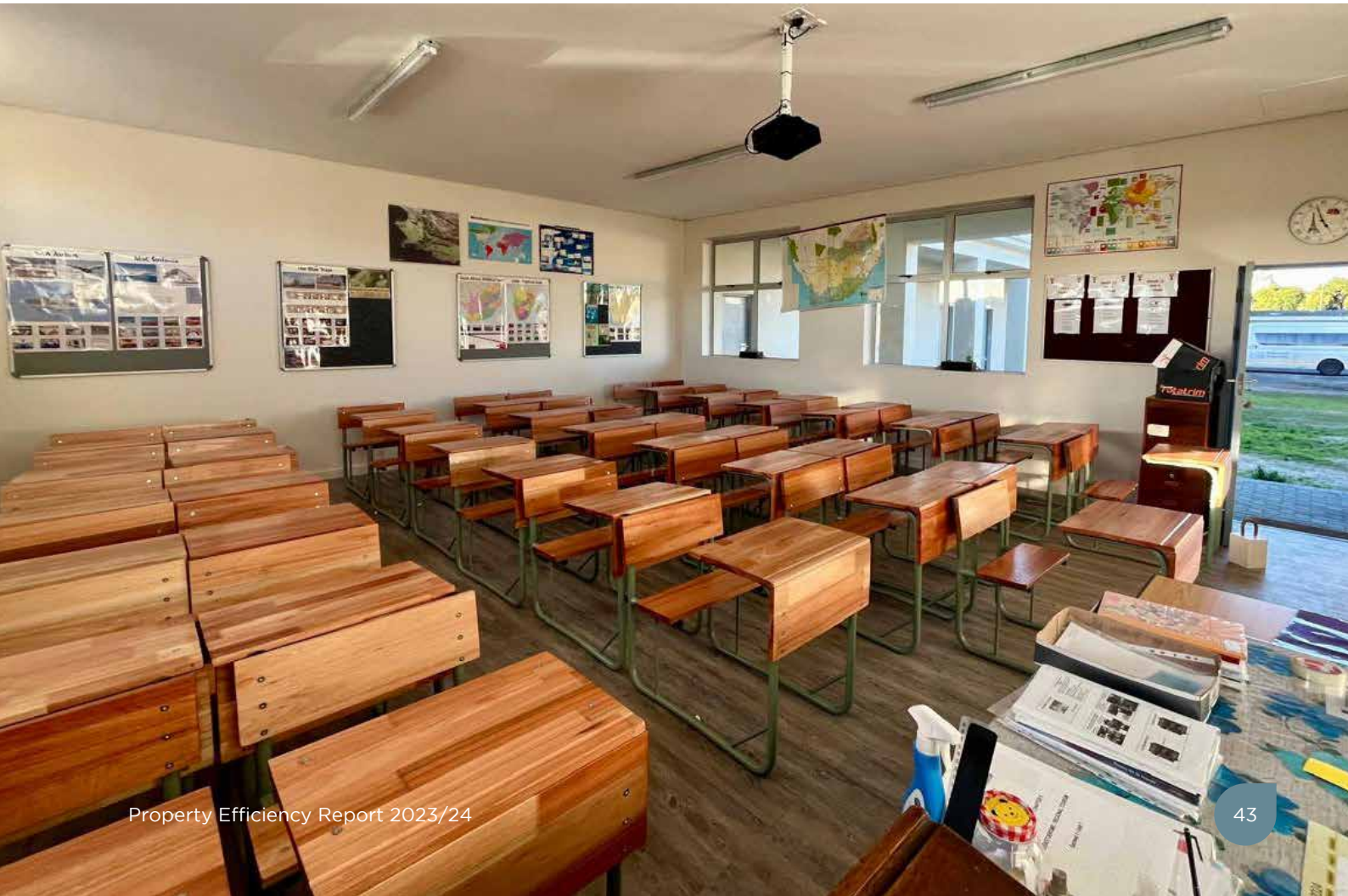
Health facility	Usable area m² 2023/24	Energy 2023/24 kWh/m²/annum	Water 2023/24 kl/m²/annum	Number of daily vistors per annum	Number of beds
All health facilities	890 911	88	1.60	421 016	-
All clinics	5 219	70	1.60	366 078	-
Barrydale Clinic	447	80	1.22	18 661	-
De Doorns Clinic	709	64	0.18	59 175	-
De Rust Clinic	346	65	1.00	13 431	-
Graafwater Clinic	154	67	1.46	11 380	-
Haarlem Clinic	256	45	-	12 034	-
Kayamandi Clinic	617	132	2.02	45 538	-
Klapmuts Clinic	290	97	4.03	31 395	-
Klawer Clinic	256	89	0.59	25 344	-
Lutzville Clinic	307	71	1.06	27 413	-
Pacaltsdorp Clinic	730	34	1.34	55 716	-
Piketberg Clinic	439	85	3.90	35 274	-
Saldanha Clinic	484	64	1.55	26 861	-
Still Bay Satellite Clinic	184	19	0.32	3 856	-
All hospitals	885 692	88	1.60	54 938	65 966
Beaufort West Hospital	5 456	107	0.45	1 091	684
Caledon Hospital	5 815	146	0.41	562	600
Ceres Hospital	6 790	85	2.65	1 952	1 096
Citrusdal Hospital	2 353	223	2.73	143	408
Clanwilliam Hospital	2 731	49	3.74	398	600
George Hospital	29 214	117	0.64	4 868	3 432
Groote Schuur Hospital	365 210	80	-	7 069	12 106
Helderberg Hospital	7 246	169	0.44	4 021	2 172
Karl Bremer Hospital	26 315	157	2.51	6 963	3 732
Khayelitsha Hospital	23 485	17	2.22	2 277	4 080
Mitchells Plain Hospital	25 771	17	0.05	3 902	4 960
Murraysburg Hospital	1 041	154	3.40	143	168
New Somerset Hospital	28 547	85	2.01	2 092	4 224
Otto du Plessis Hospital	2 290	89	1.63	436	360
Oudtshoorn Hospital	11 688	147	1.24	1 902	1 476
Paarl Hospital	31 853	162	1.42	4 269	3 860
Riversdale Hospital	4 964	146	1.08	491	600
Robertson Hospital	3 027	138	2.61	738	600
Tygerberg Hospital	268 643	96	1.60	6 060	16 608
Vredendal Hospital	3 789	155	1.13	1 221	900
Worcester Hospital	29 464	154	0.83	4 340	3 300



Education facility	Included		Excluded water	
	Size (m²)	No.	Size (m²)	No.
Primary schools	204 530	37	-	-
High schools	196 585	23	-	-
Total	401 115	60	-	-

Education facility	Useable area m² 2023/24	Energy 2023/24 kWh/m²/ annum	Water 2023/24 kl/m²/ annum	Number of learners	Average school fee per learner	Number of classrooms
All educational facilities	401 116	14	0.67	57 386	R17 077	1 744
Primary schools	204 531	10	0.61	33 989	R19 329	1 081
Alfred Stamper Public Primary School	3 045	8	4.77	1 304	No fee school	28
Aristea Primary School	8 332	1	0.48	1 138	R12 650	36
Ashton Primary School	1 180	18	0.77	248	R15 950	9
Bella Vista Primary School	3 680	5	0.55	904	No fee school	26
Bonnievale Primary School	5 361	12	1.96	1 175	No fee school	31
Bontebok Primary School	4 984	11	1.26	903	No fee school	48
Courtrai Primary School	7 396	8	0.15	719	R25 300	24
Dagbreek Primary School	3 138	21	2.16	1 259	No fee school	31
Dalubuhle Primary School	3 181	12	0.33	728	No fee school	20
De Tyger Primary School	4 694	13	1.66	585	R16 030	37
De Villiers Primary School	4 257	17	1.27	982	No fee school	23
De Waalville Primary School	1 339	25	1.31	971	No fee school	37
Durbanville Preparatory School	4 274	15	0.76	1 110	R22 800	30
Durbanville Primary School	7 534	9	0.37	1 191	R25 700	41
Eikestad Primary School	9 158	6	0.10	880	R27 600	32
Groendal Primary School	3 033	14	0.36	925	No fee school	28
Groot Brak Primary School	5 711	6	0.41	955	No fee school	30
Mamre Primary School	2 524	22	0.68	792	No fee school	26
Milkwood Primary School	32 692	3	0.08	756	R14 250	28
Mooi-Uitsig Primary School	4 414	11	0.13	844	No fee school	26
Okkie Smuts Primary School	2 797	11	0.21	269	R11 000	10
Pacaltsdorp Primary School	3 558	18	0.62	1 451	No fee school	36
Parkdene Primary School	5 738	10	0.13	1 466	No fee school	41
Parow East Primary School	5 132	10	0.14	862	R9 300	26
PJB Cona Primary School	3 645	0	0.00	1 135	No fee school	31
Plettenberg Bay Primary School	5 617	19	0.43	680	R20 900	27
Pniel Primary School	3 380	11	0.95	699	No fee school	26
Prince Albert Primary School	3 379	13	0.58	1 133	No fee school	31
Rhenish Primary School	7 087	12	0.61	698	R29 300	24
Rosemoor Primary School	3 738	6	0.18	774	No fee school	24
Stellenbosch Primary School	8 364	15	1.30	978	R23 650	37
Swartberg Primary School	4 057	14	0.87	1 097	No fee school	34
Towerkop Primary School	2 770	11	0.61	1 130	No fee school	27
Volschenk Primary School	9 909	4	0.16	457	R12 918	17
Welgemoed Primary School	6 092	19	0.76	816	R27 510	37
Welwitschia Primary school	4 753	17	0.34	1 317	No fee school	34
Worcester East Primary School	4 588	20	0.99	658	R14 400	28

Education facility	Useable area m² 2023/24	Energy 2023/24 kWh/m²/ annum	Water 2023/24 kl/m²/ annum	Number of learners	Average school fee per learner	Number of classrooms
High schools	196 585	19	0.74	23 397	R15 076	663
Ashton Secondary School	8 265	7	2.70	1 313	No fee school	41
Atlantis Secondary School	7 521	16	0.15	1 530	No fee school	44
Belgravia Secondary School	6 940	11	0.13	1 061	R7 613	30
Breede Valley School of Skills	8 599	87	0.00	279	R1 500	-
Charleston Hill Secondary School	6 069	10	0.32	1 011	No fee school	32
De Grendel Special School	16 862	16	0.25	445	R5 000	-
De Villiers Graaff High School	11 713	1	0.10	383	R21 148	15
DF Malan High School	6 087	12	1.29	1 156	R37 015	43
Durbanville High School	4 750	56	0.67	1 481	R37 600	43
Eben Donges High School	6 870	10	0.15	773	R11 000	32
Edgemead High School	3 460	34	4.44	1 398	R30 000	47
Eersterivier Secondary School	6 640	36	0.42	1 315	R2 100	33
Franschhoek High School	7 904	6	1.07	697	R13 740	23
Kulani Secondary School	5 552	33	0.88	1 207	No fee school	36
Montague High School	5 199	11	0.51	573	R14 300	14
Oaklands High School	5 257	14	19.92	1 161	R2 900	27
Olympia School of Skills	9 690	25	0.93	509	R1 350	-
Outeniqua High School	19 450	11	0.22	1 729	R31 658	61
Oval North Secondary School	8 236	14	0.24	1 312	R1 950	35
Pacaltsdorp Secondary School	3 556	52	3.07	1 372	No fee school	38
Parow High School	9 882	15	0.76	1 195	R19 500	33
Weskus Special School	19 329	8	1.05	499	R3 000	-
York High School	8 754	12	0.55	998	R30 000	36



CASE STUDY

Case study: Energy efficiency certification for Khayelitsha Hospital

In the dynamic community of Khayelitsha, the district hospital reached a notable energy efficiency milestone by securing its Energy Performance Certificate. This achievement met regulatory obligations under the EPC regulations and underscored the Western Cape Government's dedication to sustainability and operational efficiency, currently focussed on its office and education portfolio of facilities exceeding 1 000m^2. The hospital adhered to the SANS1544:2014 standard, the EPC benchmark, demonstrating stringent compliance with national energy efficiency criteria.

The certification process followed a detailed sequence of steps, beginning with the hospital's registration on the National Building Energy Performance Register (NBEPR). Accurate data collection and verification were undertaken through a site visit, which included gathering additional site-specific information focusing on energy exclusions. This groundwork facilitated precise EPC calculations and led to the creation and finalisation of the certificate, which was approved for the NBEPR. The hospital's energy performance was assessed in terms of energy consumption per square metre per annum (kWh/m^2/pa), benchmarked against E2 (Hospital) and G1 (Office) standards.

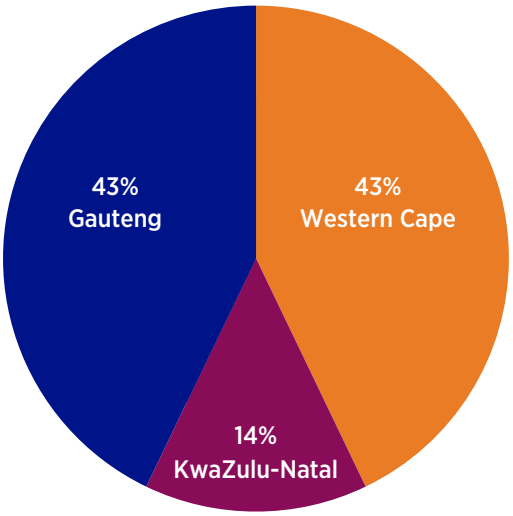
Obtaining the EPC increased awareness of energy use, prompting initiatives for further improvements, thereby reducing energy costs; savings which allow more funds to be spent on enhancing patient care

and comfort. This contributes to the national trend in South African National Energy Development Institute (SANEDI) data reflecting a growing number of energy-certified hospitals.

South Africa boasts **seven** hospitals that have obtained an EPC rating, with three additional hospitals in the certification process. Only one hospital has achieved a B rating. **Khayelitsha Hospital follows with a commendable C rating**, reflecting a 279.69kWh/m²/pa consumption. Two of these seven certified hospitals are public institutions, whereas the remaining five are privately operated. Khayelitsha Hospital is set to be the first public hospital in the Western Cape to receive its EPC.

Khayelitsha Hospital's energy efficiency certification journey reflects the real cost and environmental benefits of pursing an EPC. Compliance with standards and operational enhancements not only improves the hospital's care environment, but also establishes it as a benchmark for energy efficiency in healthcare.

Performance scale	Number of hospitals
B	1
C	1
D	3
F	2



Location of hospital per province

Chapter 5

The way forward

DR GAVIN KODE
Deputy Director-General: Provincial Public Works

In 2019, Saray Khumalo became, on her fourth attempt, the first Black African woman to summit Mount Everest. Her journey exemplifies the values of resilience, perseverance, and determination. Khumalo reflects on her experience by stating, “The best is yet to come. Be patient. Stay the course, trust the process... Life unfolds with challenges and triumphs, and each moment paves the way for a future full of possibilities. Embrace the journey, learn from the present, and stay resilient”. These words resonate with our journey toward property efficiency, a path similar to high-altitude mountaineering, filled with both trials and triumphs, demanding strength, resilience, and an unwavering commitment to reaching new heights in sustainability.

Our property efficiency journey parallels the challenges faced in mountaineering. It has required perseverance, teamwork, consistency, preparation, planning, and training - qualities essential both for reaching the summit and returning safely to base camp. I commend all officials and service providers involved in this mission with us for their dedication and resolve, ensuring not only our ascent but also our safe return, ready for further progress on our sustainability journey.

Sustainability in the built environment is crucial to global sustainability, and it is our responsibility to contribute meaningfully to this cause.

Sustainability in the built environment is crucial to global sustainability, and it is our responsibility to contribute meaningfully to this cause. The UN Sustainable Development Goals serve as a global roadmap for people and the planet, and we must align our efforts accordingly. In 2022, the Western Cape Government initiated a strategic partnership with the regional government of Flanders in Belgium, establishing work groups to promote sustainability collaboration. By October 2023, we explored a partnership with the Flanders Facility Agency on the SDG Project, finding significant alignment between their vision and our Public Works mandate to provide sustainable infrastructure and accommodation. This partnership has enabled us to share expertise, experiences, and resources, focusing on those SDGs where there is substantial overlap with our operations.

In July 2024, a delegation visited Brussels to further this collaboration, formalising a memorandum of intent and engaging in sustainability discussions in the public sector built environment. Our work with the Flanders Facility Agency underscores the power of global partnerships in driving sustainable change. By aligning with international sustainability agendas, we advance our mission toward a more sustainable future.

During London Climate Action Week in June 2024, our delegation attended the World Green Building Council Leadership Summit as part of the Global Solutions Forum, a significant event that brought together global sustainability leaders with a focus on finance as a critical tool for transforming the building sector. These engagements with international counterparts, including the UK Green Building Council and some of their members, have been instrumental in fostering knowledge exchange and best practices in sustainable property management.

Since 2015, we have envisioned a departmental-wide asset information management system, which culminated in the launch of eMerge in 2021. This system has revolutionised our approach to property asset management, enhancing visibility, streamlining operations, and optimising resource allocation. Recent efforts have focused on fully implementing the Project Control System (PCS) module across all infrastructure components, optimising the Immovable Asset Register, Leasing-in, and Acquisitions modules, and developing new capabilities for managing municipal charges and asset management plans. We are also advancing in areas such as time-of-use metering, visualisation, spatial mapping, and exploring technologies like building information modelling (BIM), virtual reality, 3D printing, and artificial intelligence to enhance our operations.

The Western Cape Energy Resilience Programme (ERP), formalised in 2023 with a budget of R1.1 billion, aims to build energy resilience and reduce load shedding. The Department plays a key role in the ERP, focusing on new energy generation, demand-side management, infrastructure development, and long-term planning. Our efforts have contributed significantly to making the Western Cape less reliant on Eskom, potentially positioning it as the first province to end load shedding. Notably, the Stellenbosch Municipal Independent Power Producer Procurement (MIPPP) project is on track, exploring the viability of a 50MWp solar PV facility with battery storage—a pioneering initiative in South Africa.

In response to the national energy crisis, the Department has undertaken feasibility assessments for alternative energy sources and backup power across office facilities, expanding solar PV and battery backup installations. Additionally, our commitment to green building practices is evident through our longstanding association with the Green Building Council of South Africa. Over the past decade, we have trained 94 built sector professionals, achieved multiple Green Star certifications, and continually supported the GBCSA convention, emphasising our dedication to sustainable building practices.

Our Office Modernisation Programme continues to improve office accommodation and facilities across departments, implementing green building policies and energy-efficient installations wherever possible. This programme also aims to optimise space usage by prioritising owned accommodation over leased spaces. Recent projects have included the modernisation of office spaces, implementation of hot desking initiatives, and universal access improvements, all contributing to better service delivery and higher productivity.

In 2023 and 2024, we achieved significant progress in issuing energy performance certificates, with 808 certificates issued to date. Despite challenges such as legislative changes, data quality issues, and financial constraints, we remain committed to meeting the December 2025 deadline. Our efforts include allocating properties to inspection bodies, improving stakeholder engagement, enhancing data management, and leveraging innovative technologies for energy efficiency improvements. Notably, the Khayelitsha Hospital became the first public hospital in the Western Cape to receive an EPC, setting a benchmark for others.

Looking ahead, we aim to achieve Green Star-certified Sustainable Urban Precinct certification for the Founders' Gardens development, highlighting our commitment to sustainable urban planning. Our rooftop solar PV programme and battery backup initiatives further demonstrate our dedication to renewable energy adoption, reducing reliance on traditional energy sources, and paving the way for a greener future.

Reflecting on our achievements, challenges, and future directions, it is clear that our commitment to sustainability remains steadfast. We continue to lead the way in creating a more sustainable and efficient future, guided by innovation, collaboration, and sustainable practices.

As Saray Khumalo reminds us, "Breathe through challenges, embrace lessons, and hold steady. The journey moulds you for remarkable chapters ahead. Keep going." As we strive for excellence in sustainable development, we recognise that challenges and obstacles are part of the journey. Yet, it is through these experiences that we are shaped and prepared for greater achievements ahead. As Pat Reilly aptly put it, "Excellence is the gradual result of always striving to do better".

Case study: Advancing sustainability: The Western Cape Education Department's commitment to green energy

The Western Cape Education Department (WCED) has embarked on an ambitious programme to implement green initiatives in its schools.

The WCED's green initiatives were developed to address two core objectives: **improving energy efficiency and resilience**. Energy efficiency focuses on reducing electricity consumption through retrofitting LED (light-emitting diode) lighting technology. Energy resilience aims to minimise the impact of load shedding on educational activities by installing solar PV panels and battery energy storage systems (BESS) in schools.

Key initiatives

- **Energy Efficiency Programme:** This initiative involves replacing outdated lighting with LED technology, significantly cutting energy usage and reducing electricity bills for schools.
- **Energy Resilience Programme:** Solar PV panels and BESS are installed in key school areas to ensure essential functions continue during power outages.

Stakeholders and partnerships

Several stakeholders and partnerships are integral to the success of the green initiatives.

- **Schools and local communities:** Direct beneficiaries and active participants of the initiative.
- **Western Cape Government:** Provides infrastructural support and policy guidance.
- **University of Stellenbosch:** Partnered with WCED in a pilot project to improve energy efficiency in 75 schools.
- **GreenX Engineering:** Works alongside the University of Stellenbosch as a technical partner, conducting energy audits and implementing efficient solutions.

Implementation and current status

As of mid-2024, the project has achieved significant progress:

- **119 schools** have undergone lighting retrofits.
- **61 schools** have solar PV systems installed.

Feedback from participating schools has been overwhelmingly positive, with reports of reduced energy costs and increased interest from schools wanting to join the initiative.

Funding and financial aspects

The initiative's funding comes from multiple sources, including Provincial Treasury allocations, partnerships, and contributions from schools. Although there are no formal incentives for retrofitting, the quick return on investment provides a compelling business case for schools to participate.

Challenges and opportunities

The programme has faced challenges regarding supply chain constraints, particularly in sourcing LED fittings and a saturated market for solar PV contractors. Despite these challenges, significant opportunities for expansion remain, notably in schools which have high electricity consumption because of their outdated lighting.

Scalability and future plans

The programme's scalability faces financial limitations, prompting the exploration of blended finance arrangements to widen impact. Plans are in place to continue expanding the initiative in the 2024/25 and 2025/26 financial years.

Success stories and long-term sustainability

Projects like Cloetesville Primary School showcase the programme's success, with sustainable energy solutions proving effective across 60 additional schools. To provide long-term sustainability, schools receive support for maintaining their systems through regular maintenance and reinvesting the financial savings arising from reduced energy bills.

In conclusion

The WCED's green initiatives have set a benchmark for energy sustainability in educational environments. With several successful pilots and widespread interest from schools, the WCED is well-positioned to build on its momentum. By fostering partnerships and leveraging innovative funding models, the Department aims to continue driving significant environmental and economic benefits for schools across the Western Cape. The success of these projects exemplifies how targeted governmental interventions can lead to substantial improvements in resource efficiency and resilience, creating a model that can be replicated elsewhere.

Acknowledgements

This 13th edition of the Property Efficiency Report reflects the steadfast dedication, hard work and creative inputs of all stakeholders, particularly those in the Immovable Asset Management Chief Directorate of the Department of Infrastructure.

As part of the Department's dedication to accumulating valuable insights aimed at comprehensively enhancing infrastructure performance, we continue to broaden the number of health and education facilities we report on. At the same time, our in-depth analysis of the office portfolio continues to generate insightful results.

In this edition, we report on our continued progress in meeting the legislative requirement for energy performance certificates in our office, education and health facilities by 7 December 2025. We are excited to include Khayelitsha Hospital on the list of facilities that have received their EPCs. We are also pleased to announce that we can now compare our facilities' performance with those of the City of Cape Town.

We would like to express our appreciation to all individuals who have contributed to 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.

Neliswa Fusa
Property Support
Immovable Asset Management
Department of Infrastructure
Western Cape Government
Tel: 021 483 8568

Data sources

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

Western Cape Education Department

Department of Health and Wellness

Department of Police Oversight and Community Safety

City of Cape Town

Green Building Council of South Africa

MSCI

Rode's Report on the SA Property Market Quarter 1 of 2024

South African Property Owners' Association

Various municipalities in the Western Cape

Various reports from the governments of Australia and New Zealand

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 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.
BESS	Battery energy storage systems
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 16 WCG offices in the Cape Town Central Business District in the study sample of this report. The portfolio comprises around 126 843m^2 of occupied office space.
CCT	City of Cape Town
Central Improvement District (CID)	CID levies are fees paid by property owners within a Central Improvement District.
CO_2	Carbon dioxide, an acidic colourless gas that occurs naturally in the Earth's atmosphere as a trace gas. Emissions caused by humans, primarily from the use of fossil fuels and deforestation, have rapidly increased their concentration in the atmosphere and led to climate change.
Cost/total costs	References in this report to costs and total costs represent the following: • Total occupancy costs for leased buildings, 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, comprising 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. • Total occupancy costs for owned buildings, comprised of an approximate market rental rate to facilitate direct comparison with leased space. • Annual operating expenses, including rates and taxes, support services, repairs and maintenance, and management fees.
CSI	Corporate social investment
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 facilities	The 60 Western Cape Education Department primary and high schools included in the study sample of this report.
Energy performance certificate (EPC)	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 2023/24 are classified in groups G1, A2, A3, and E2; climatic zone 1 to 7
E_r	Standard value against which an energy indicator/rating is compared
ESG	Environmental, social, and governance factors assess the sustainability and ethical impact of companies and countries based on their environmental practices, social responsibility, and governance standards.

FTE	Full-time equivalent employee
GBCSA	Green Building Council of South Africa
Health facilities	The 34 WCG hospitals and clinics included in the study sample of this report.
iOffice	A North American-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.
kWp	Kilowatt peak - the unit of measurement for the output of a photovoltaic system
Light-emitting diode (LED)	An LED is a semiconductor that emits light when current passes through it.
MWh	Megawatt hour – 1 000 kilowatts of electricity delivered continuously for one hour.
NBEPR	National Building Energy Performance Register
Non-CBD offices	The 19 WCG offices outside the Cape Town Central Business District in the study sample of this report. The portfolio comprises around 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.
PA	Per annum
Performance	The performance of the Western Cape Government office study sample portfolio has been assessed using three standard metrics of property efficiency – cost per square metre, space per FTE, and cost per FTE – to report internal efficiencies 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 2023/24 is from 1 April 2023 to 31 March 2024.
SANEDI	South African National Energy Development Institute
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 Services 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 North American-based company specialising in human resources and career building.

Department of Infrastructure
Head Office, 9 Dorp Street, Cape Town, 8001.
Tel: 021 483 8568
www.westerncape.gov.za

Western Cape Government

FOR YOU