

Natural capital

Environmental sustainability

Our ambitious and bold 2030 environmental sustainability strategy will continue to set us apart as a leader in healthcare sustainability and is designed to drive further financial savings, while getting us closer to our long-term 2050 net zero strategy (aligned to the 1.5 degree pathway of the Paris Accord). We aim to complete the bulk of our carbon neutrality work by FY 2030. Not only does the strategy positively contribute to the environment but it is also a key aspect of our efforts to enhance efficiencies across our facilities, and will help to de-risk the Group from the impacts of climate change and resource scarcity.


How we performed

Key focus areas for FY 2023

- Implementing initiatives to meet our FY 2023 BSC targets as interim steps to our 2030 targets.
- Closing gaps in our monitoring capabilities by installing meters on our smaller plantrooms that were previously excluded from our meter projects¹, and integrating our medical air compressors and vacuum pumps into our plantroom monitoring platform to gain better data on these energy-intensive assets.
- Developing an action plan to improve our CDP reporting with the aim of improving to an A rating for both climate change and water over the next two years.

This section responds to the following risks and opportunities:


- 3 Availability of electricity supply.
- 5 Water security.

 Our risks and opportunities: PG 65.

Related information

 This report

Estate, medical equipment and 'green' infrastructure: PG 155

 Detailed disclosure online

ESG report: PG 38

¹ Over 95% of the Group's energy, water and waste consumption is monitored by a fully digital enterprise sustainability platform.

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Environmental sustainability continued

Environmental sustainability programme

Africa's largest healthcare environmental sustainability programme.

Since implementation in FY 2013, our environmental sustainability programme, comprising 255¹ projects with 97% relating to energy efficiency, has reduced absolute Scope 1 and Scope 2 emissions by 13% and Scope 1 and Scope 2 emissions per bed by 36%. Energy intensity per bed has reduced by 39%, surpassing our ten-year stretch target of 30% set in FY 2013. To date, our projects have yielded cumulative benefits equating to 234% of the capex invested.

Cumulative financial results (Rm)	Capex to 2023	Operational savings to 2023	Cash saving	Cost avoidance
Energy (since FY 2013)	608	1 275	328	947
Waste (since FY 2017)	14	58	10	48
Water (since FY 2014)	2	130	53	77
Total	624	1 463	391	1 072

For FY 2023, capex of R39 million (FY 2022: R35 million) and operational expenditure of R24 million (FY 2022: R23 million) were allocated towards achieving the targets of our 2030 environmental sustainability strategy. Operational savings for the year totalled R377 million, comprising cash savings of R102 million and cost avoidance of R275 million (FY 2022: R265 million).

Cost per patient day (Hospital Division)	Actual cost 2023	Cost in absence of optimisation 2023	Actual cost 2022
Electricity (R)	171	283	168
Water (R)	55	76	41
Medical waste disposal (R)	23	27	23
General waste disposal ¹ (R)	9	9	9
Total cost per patient day	258	395	241

Note 1. There is no significant saving in terms of general waste as the cost to recycle is almost equivalent to the cost to landfill.

Shift in focus

Until recently the environmental sustainability programme was primarily focused on capital-intensive initiatives to achieve significant savings and return on investments. While we will continue to pursue capital-intensive projects where necessary, we have prioritised operational efficiency; optimally managing available resources while still achieving the same outcomes of reduced costs and lower impact on the environment.


Sustainability-linked bond

In FY 2021, we entered into a sustainability-linked bond which raised R1 billion. The bond was linked to a reduction in total electricity consumption by source, total renewable energy procured, an absolute reduction in Scope 2 emissions and the amount of greywater recycled. At the end of FY 2022, all targets had been met, resulting in the margins of the bond reducing from March 2023 to March 2024, representing a R1 million saving.

1. 56 projects in our environmental sustainability programme are still active.

Carbon footprint and energy efficiency

To achieve our net zero ambitions, the Group will need to be agile; adapting programmes when challenges are met, evaluating and piloting new technologies, and implementing solutions that deliver accurate and reliable data, particularly from within the value chain.

	Scope 2 emissions	Scope 1 and 2 emissions
Targets	Achieve 100% renewable energy by 2030	Reduce both by a combined 84% by 2030 (from FY 2023 baseline going forward ¹)
Scope	Group	Group
Performance against targets, including BSC targets	<p>Renewable energy</p> <p>Currently, we use around 195 GWh of electricity a year. For FY 2023 14.6 GWh (8%) was generated from our solar PV fleet across SA.</p> <p>1 081 additional year-on-year tCO₂e avoided from renewable energy sources.</p> <p>2023 BSC target: 1 072 tCO₂e FY 2022: 861 tCO₂e FY 2021: not reported</p> <p>The use of renewable energy resulted in a R34 million cost saving.</p> <p>FY 2022: R28 million FY 2021: R26 million</p>	<p>Intensity ratio: Scope 1 and Scope 2 emissions to beds (Group)</p> <p>2.8% year-on-year increase² in Scope 1 and Scope 2 emissions to 21.41 tCO₂e/bed.</p> <p>FY 2022: 20.82 tCO₂e/bed FY 2021: 21.82 tCO₂e/bed FY 2013 baseline: 33.56 tCO₂e/bed</p> <p>Intensity ratio: Scope 1 and Scope 2 emissions to revenue (Group)</p> <p>5.5% year-on-year decrease in Scope 1 and Scope 2 emissions to 9.86 tCO₂e/Rm.</p> <p>FY 2022: 10.43 tCO₂e/Rm FY 2021: 11.65 tCO₂e/Rm FY 2013 baseline: 20.09 tCO₂e/bed</p> <p>Energy efficiency</p> <p>1 324 additional year-on-year tCO₂e avoided from energy efficiency projects.</p> <p>2023 BSC target: 1 026 tCO₂e FY 2022: 1 480 tCO₂e FY 2021: not reported</p>
Key initiatives for FY 2023	<ul style="list-style-type: none"> Increased our solar PV footprint. Entered an agreement with an energy trader to purchase grid-wheeled renewable energy for six sites. <p> Renewable energy: PG 159.</p>	<ul style="list-style-type: none"> Generator load curtailment to reduce diesel consumption during load shedding, for example, reducing the use of high-consumption and non-critical equipment. Fully automated the laundry boiler system. Ensuring that unoccupied theatres, wards and units do not draw unnecessary power. Procuring energy efficient equipment and new technologies, for example, fresh air pre-treatment units to pre-treat the air in plantrooms, reducing energy consumption. A number of natural gas initiatives, saving around R3 million.

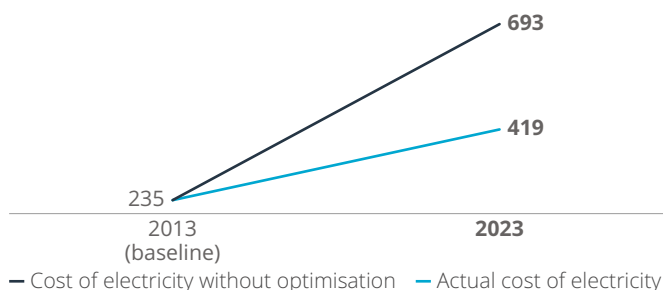
How we performed

1. Originally reported as FY 2020. Due to the impact of COVID-19 on the business over 2020 to 2022 and our current business recovery, FY 2023 will establish a more representative baseline.
2. Impacted by load shedding.

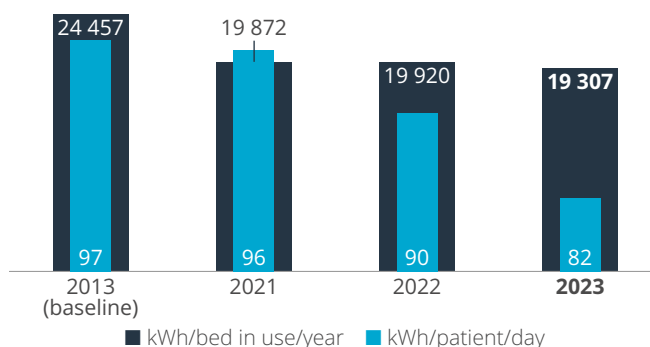
Natural capital

Environmental sustainability continued

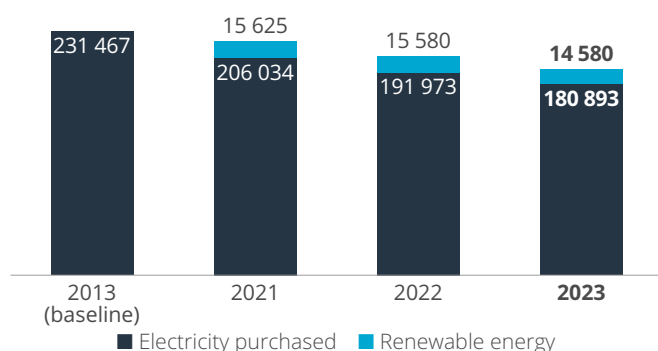
Optimisation impact from energy saving initiatives (Rm)



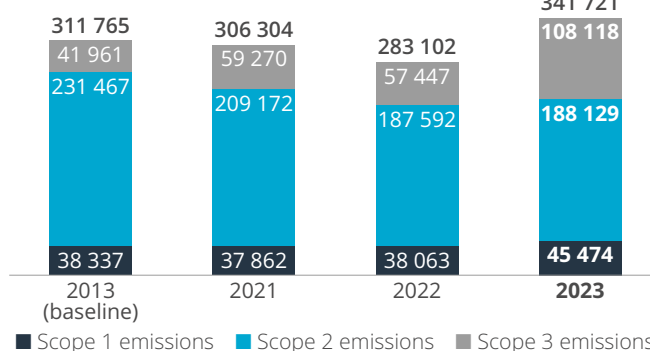
Group energy intensity on monitored facilities (kWh)



Group energy consumption (MWh)



Group carbon emissions (tCO₂e)



FY 2023 performance

Total energy consumed increased 9.3% to 1.0 million gigajoules as a result of the increase in patient days for the Hospital Division and Netcare Akeso. Excluding renewable energy, direct energy use, which includes diesel consumption, increased 53.7% and electricity purchased decreased by 5.8% mostly due to our sustainability efforts but also impacted by load shedding. The cumulative electricity tariff increase since FY 2013 is 146%, meaning that had we continued with business as usual our electricity cost per bed per year would have been R66 382 compared to our current electricity cost per bed of R40 151.

Scope 1 emissions increased 19.5%, negatively impacted by the need to use diesel-operated generators during significantly increased levels of load shedding in FY 2023. Unlike FY 2022¹, we did not purchase renewable energy in FY 2023, resulting in our Scope 2 emissions increasing marginally year on year by 0.3%. Scope 3 emissions increased 88.2% to 108 118 tCO₂e in FY 2023, largely attributable to improvements in Scope 3 reporting by the Group and our suppliers. Water and waste (which contribute to these emissions) decreased during this period.

Note: all energy and emissions data reported covers SA and Lesotho up to FY 2021 and thereafter only covers SA. Electricity meters cover more than 100% of the hospital network, 75% of Primary Care and 100% of Netcare Akeso electricity expenses.

Beyond shifting towards renewable energy and implementing energy efficiency projects, initiatives to achieve net zero by 2050 will include:

- Establishing a carbon offset programme to offset unavoidable carbon emissions.
- Closing gaps in our emissions data; currently our Scope 3 emissions reporting is limited and is calculated using various assumptions. Accurately quantifying Scope 3 emissions is a key step towards setting science-based emissions reduction targets. We have set a target to reduce Scope 3 emissions by 6% by FY 2030.
- Regular engagement to drive supplier awareness around climate change, influencing them to reduce their carbon emissions in line with 1.5 degree pathways.
- Developing a plan to align the Group's business strategy with a 1.5 degree Celsius world.
- Exploring ways to reduce the emissions of Netcare 911's emergency ambulance fleet (electric ambulances and biofuel²).

1. 15 GWh of renewable energy purchased in FY 2022.

2. This initiative remains in its very early stages and implementation is likely to commence in the medium to long term.

Water

We have introduced a water stewardship programme to raise awareness within the Group on best practice in terms of water management, water conservation and our water initiatives as we work towards establishing a more solid water baseline against which to benchmark our performance.

Water consumption					
Target	Reduce our water consumption (fresh and treated water) from 500 litres per bed per day to 400 by 2030 (a 20% reduction)				
Scope	Group				
Performance against target, including BSC targets	<table border="1"> <thead> <tr> <th>Litres per bed per day (Group)</th> <th>Water savings (Hospital Division)</th> </tr> </thead> <tbody> <tr> <td>14% year-on-year decrease in litres per bed per day to 426 litres per bed per day. FY 2022: 493 l/bed/day FY 2021: 458 l/bed/day FY 2014 baseline: 592 l/bed/day</td> <td>8% reduction in overall water consumption to 1 411 369 kl. 2023 BSC target: 3% FY 2022: 1 533 526 kl FY 2021: not reported</td> </tr> </tbody> </table>	Litres per bed per day (Group)	Water savings (Hospital Division)	14% year-on-year decrease in litres per bed per day to 426 litres per bed per day. FY 2022: 493 l/bed/day FY 2021: 458 l/bed/day FY 2014 baseline: 592 l/bed/day	8% reduction in overall water consumption to 1 411 369 kl . 2023 BSC target: 3% FY 2022: 1 533 526 kl FY 2021: not reported
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Key initiatives for FY 2023	<ul style="list-style-type: none"> • Exploring the feasibility of wastewater treatment plants at certain facilities (see page 160). • Engaged on water initiatives at facility level and with cleaning and catering suppliers. • Harvesting rainwater for irrigation. • Efficient management of onsite laundry facilities and recycling initiatives at our central laundry facility. • Renewed focus on operational efficiencies. • Converting our HVAC cooling towers to alternative energy efficient technologies that do not use water. 				

How we performed

Key priorities for our water stewardship programme are to close gaps in our water data and complete a water risk assessment to quantify the financial impact of water-related risks and opportunities on the business, including from within the value chain. This will provide the foundation to develop a capex programme to implement sustainable water sources and reduce our water demand. We will also introduce water policies aligned to international best practice and set facility-level water targets.

Intensity ratio: total water to revenue (Group)

42% decrease in overall water consumption from 125 kl/Rm in FY 2014 (baseline) to **72 kl/Rm**.

FY 2022: 90 kl/Rm
FY 2021: 89 kl/Rm

Intensity ratio: total water to beds (Group)

28% decrease in overall water consumption from 216 kl/bed in FY 2014 (baseline) to **155 kl/bed**.

FY 2022: 180 kl/bed
FY 2021: 167 kl/bed

Water recycled (Group)

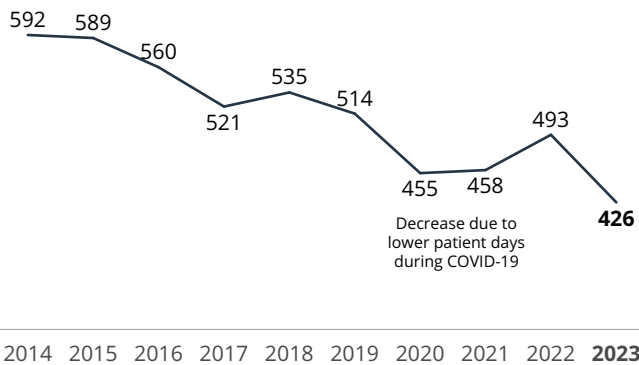
63 345 kl of water recycled.

FY 2022: 27 043 kl
FY 2021: not reported

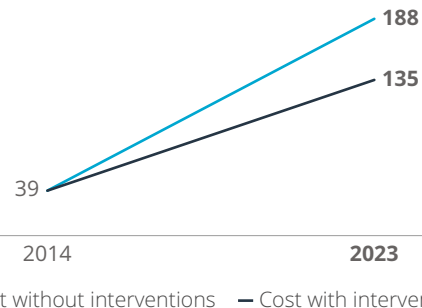
Natural capital

Environmental sustainability continued

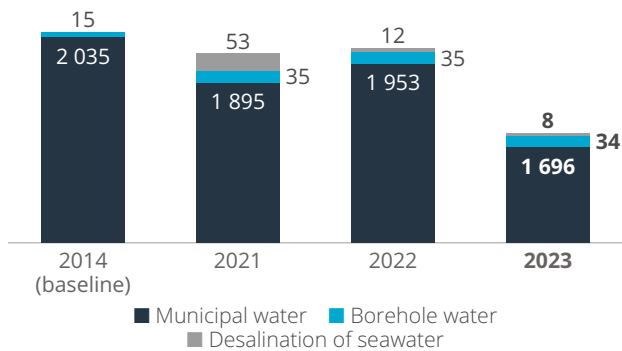
Group water reduction (litres per bed per day)



Optimisation impact from water saving initiatives (Rm)



Water consumption (megalitres)



General note: FY 2014 borehole consumption is estimated due to limited metering capacity at the time of programme inception. All water data reported covers SA and Lesotho up to FY 2021 and thereafter only covers SA. Any reference to total water consumption excludes recycled water and borehole water. Water meters cover all hospitals and from FY 2024 will cover all Netcare Akeso facilities.

FY 2023 performance

The Group's overall municipal water consumption decreased 13% with an 8% decrease for the Hospital Division due to our operational efficiency drives and water saving initiatives, which offset increases in patient days as business recovery continues. Water recycling increased 134% year on year.

The costs associated with water however increased year on year by 42% due to inflation and cost-corrections applied by the municipalities; some facilities were underbilled for a number of years and others received credits in FY 2022, lowering their costs. Accrual provisions were made for these facilities.



Waste

We are targeting zero general waste certification for the Group by FY 2027¹ provided logistical and legal factors do not cause delay.

Waste											
Target	Achieve zero waste to landfill by 2030										
Scope	Group (Hospital Division is being rolled out first)										
Performance against target, including BSC targets	<table border="1"> <thead> <tr> <th>Group waste to landfill</th> <th>Hospital Division HCRW²</th> </tr> </thead> <tbody> <tr> <td>7 989 tonnes of waste to landfill. FY 2022: 8 110 tonnes FY 2021: 9 277 tonnes</td> <td>4 881 tonnes generated. FY 2022: 5 126 tonnes</td> </tr> <tr> <td>Hospital Division general waste 3 759 tonnes generated. FY 2022: 4 446 tonnes</td> <td>2.07 kg of HCRW waste per patient day. FY 2023 target: <2.21 kg/ppd FY 2022: 2.36 kg/ppd FY 2021: 3.31 kg/ppd</td> </tr> <tr> <td>2 089 (56%) tonnes to landfill. FY 2022: 3 484 tonnes; 78%</td> <td>9.3% (452 tonnes) of HCRW diverted from landfill.</td> </tr> <tr> <td>1 667 (44%) tonnes of waste reused or recycled. FY 2023 BSC target: 40% FY 2022: 403 tonnes; 28%</td> <td>FY 2023 BSC target: 6.9% FY 2022: 6.0%</td> </tr> </tbody> </table> <p><i>Note: FY 2021 not reported for Hospital Division.</i></p>	Group waste to landfill	Hospital Division HCRW ²	7 989 tonnes of waste to landfill. FY 2022: 8 110 tonnes FY 2021: 9 277 tonnes	4 881 tonnes generated. FY 2022: 5 126 tonnes	Hospital Division general waste 3 759 tonnes generated. FY 2022: 4 446 tonnes	2.07 kg of HCRW waste per patient day. FY 2023 target: <2.21 kg/ppd FY 2022: 2.36 kg/ppd FY 2021: 3.31 kg/ppd	2 089 (56%) tonnes to landfill. FY 2022: 3 484 tonnes; 78%	9.3% (452 tonnes) of HCRW diverted from landfill.	1 667 (44%) tonnes of waste reused or recycled. FY 2023 BSC target: 40% FY 2022: 403 tonnes; 28%	FY 2023 BSC target: 6.9% FY 2022: 6.0%
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Key initiatives for FY 2023	<ul style="list-style-type: none"> Established waste reduction targets for each hospital. <p>General waste</p> <ul style="list-style-type: none"> Appointed general waste service providers for all Netcare facilities (effective February 2023). These service providers have agreed to specified targets for waste diversion, which will improve our reporting of general waste data going forward. Rolled out the zero general waste to landfill project to all hospitals barring four (from eight piloted in FY 2022). <ul style="list-style-type: none"> Added the recycling of electronic waste to the zero general waste strategy. All participating hospitals divert their organic waste from landfill, converting it to compost for sale or donation to small-scale farmers. Investigated the installation of two anaerobic biodigesters (Netcare Milpark and Netcare Alberton hospitals) to ascertain the feasibility of transforming organic waste into biogas for cooking or water heating in hospital kitchens. The biodigesters will be installed in FY 2024 as pilot projects. <p>Healthcare risk waste</p> <ul style="list-style-type: none"> Implemented an HRCW waste project in the Hospital Division, where hospitals identified as major waste generators were required to monitor their waste segregation practices, train their employees to segregate waste at source, and monitor the waste generated by their various units. A comprehensive HCRW dashboard was developed for each hospital concerned. Four hospitals are participating in an HRCW beneficiation project run in partnership with the Council for Scientific and Industrial Research and Tech4Green (an SME supplier to the Group). 212 tonnes of HCRW was diverted from landfill through this initiative in FY 2023. Extended the clinical glass recycling initiative to all inland hospitals and five hospitals in KwaZulu-Natal (from three piloted in FY 2022). Roll out to additional hospitals in KwaZulu-Natal and all hospitals in the Western Cape will take place in FY 2024. 										

1. Extended by a year on what we reported last year.

2. Healthcare risk waste, which includes sharps, gloves, used medical items like bandages and infectious waste (including highly infectious or isolation waste) as well as anything anatomical. Legislative requirements and our focus mean that this waste stream is accurately reported.

Natural capital

Environmental sustainability continued

Intensity ratio: total waste generated to revenue (Group)

31% decrease in total waste generated from 491 kg/Rm in FY 2017 (baseline) to **340 kg/Rm**.

FY 2022: 378 kg/Rm

FY 2021: 444 kg/Rm

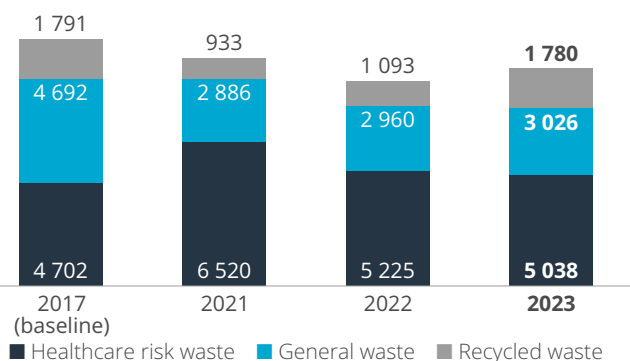
Intensity ratio: total waste generated to beds (Group)

17% decrease in total waste generated from 886 kg/bed in FY 2017 (baseline) to **739 kg/bed**.

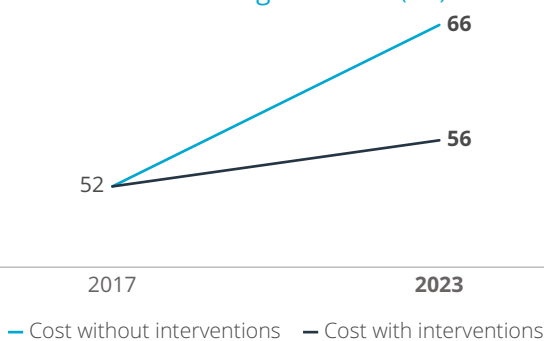
FY 2022: 755 kg/bed

FY 2021: 831 kg/bed

Group volumes of waste (tonnes)



Optimisation impact from waste sorting initiatives (Rm)



FY 2023 performance

The total volume of waste generated during the year was 8 064 tonnes (FY 2022: 8 185), of which 75 tonnes (FY 2022: 75) was incinerated. The volume of general waste diverted from landfill increased 63% and diverted HCRW increased 159%, resulting in the total volume of waste sent to landfill decreasing 1.5% year on year to 7 989 tonnes (FY 2022: 8 110 tonnes). Waste recycled increased 63% to 1 780 tonnes as a result of our waste programmes and better segregation at source. The Hospital Division diverted 109 tonnes of clinical glass, 26 tonnes of PVC, 26 tonnes of freeflex material, eight tonnes of endurocide¹ and 289 tonnes of treated infectious waste.

Note: all waste data reported covers SA and Lesotho for FY 2020 and FY 2021, and only SA for FY 2017 and FY 2022. Any reference to total waste volumes excludes recycled waste.



1. Disposable curtains used in hospital wards.