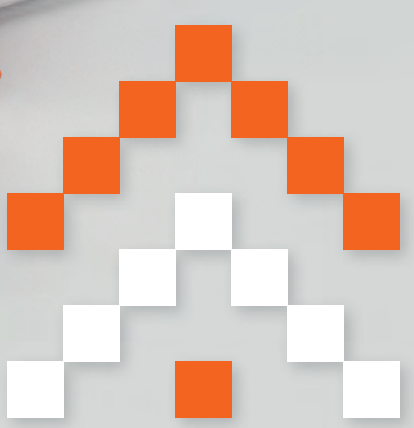


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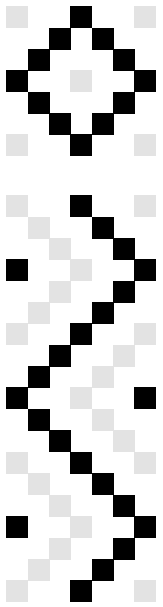


20 22

ANNUAL
REPORT



The Future
Reimagined



Statement on Environmental Sustainability

OVERVIEW

UJ has committed itself to improving on its sustainable practices in all of its University activities. The development of the UJ Strategic Plan 2025, anchored in the overarching goal of global excellence and stature (GES), has placed a requirement on the institution to improve on its sustainability footprint.

Strategic Objective Six

Strategic Objective Six, fitness for global excellence and stature, states that “We will also minimise harmful impact on our environment through managing our carbon footprint, reducing energy and water wastage, encouraging paperless communication, and overall fostering of a culture of responsible stewardship”.

UJ has seen a growing commitment towards the goal of being a sustainable institution that strives to implement improvements and actions across all spheres of its campus activities. UJ firmly believes that sustainable development is a long-term commitment and aims to contribute to sustainability by reducing its environmental footprint, while enhancing its contributions to the social and economic development of South Africa.

This report highlights some of the specific focus areas, as well as improvements achieved during 2022.

ENERGY MANAGEMENT

Carbon footprint

UJ’s carbon footprint analysis was based on its actual 2022 energy consumption. The total carbon footprint for 2022, based on energy consumption from various sources, is approximately 44 986 tons of CO₂ compared to the 38 196 tons reported during 2021 (refer to Tables 21 and 22, respectively). This indicates an increase of approximately 17,76%. This can be attributed almost entirely to the impact of a return to normality after the extended two years of reduced campus attendance during the COVID-19 lockdown levels that were applied at various times during 2020-2021. In a sense this is a return to the more normal carbon footprint figures of 2019 (54 642 tons) and, from that perspective, UJ is still showing a substantial reduction in carbon generation (a reduction from 2019 to 2022 of 25,28%).

In considering this figure, the following should be noted:

- UJ has increased its built area footprint by 13,43% since 2013 and a further 2,52% in 2022.
- The Auckland Park Kingsway Campus continued to contribute significantly to the overall carbon footprint with a net 24 731 tons of CO₂ compared to the overall University footprint of 44 986 tons.
- The methodology of measuring the carbon footprint is based on absolute consumption on main campus areas, and now also includes UJ-owned properties such as off-campus residences, but still excludes JBS Park and UJ on Empire, as these facilities are still being upgraded in terms of measurement equipment.
- While the reported solar photovoltaic power generation has led to a measurable decrease in the carbon generated by UJ – the decrease is approximately 5,53% – a reduction in the savings from the 6,501% saved in 2021 – this must be seen against the overall increase in electricity consumption experienced in 2022.



WATER MANAGEMENT

Using water sparingly has become a necessity at UJ. A water savings was achieved for 2022, and compared to 2015, there has been an overall decrease of 46,58% against the very high value of 2021. The APK water consumption in 2022 showed a 54,78% decrease from the 2020 data, a direct result of fixing of a major pipe leak on campus in 2022. As far as possible, borehole water is now being used on all campuses, and the four new boreholes for supply subvention from 2022 are now in operation.

A number of initiatives implemented in 2022 contributed to some water savings. The key focus areas in the reduction of water consumption for 2022 were as follows:

- Achieving 95% installation of water restricting showerheads in residences and installing 100% of new residences with low flow showerheads.
- Reducing water usage due to reduced supply by the CoJ as a direct result of the Eskom load shedding processes.

The key focus areas in the reduction of water consumption for 2023 are as follows:

- As far as possible replacing existing taps with push-taps at kitchen hand basins and bathrooms, and further trialling push-taps in shower cubicles to reduce water loss due to inadvertent open tap losses after water supply cuts.
- Additional drilling for water on other UJ properties.
- Conducting further awareness campaigns on campuses and in residences to achieve water savings.
- Continuing with the ongoing installation of water restricting showerheads and extending the retro-fitting of push-taps in residences and ablution facilities as funds and technological factors permit.
- Considering the use of waterless urinals to reduce water consumption and investigating a waste concentration system on the APK Campus to reduce sewage costs and allow for substantial water recovery for irrigation purposes.
- Installing the first functioning grey water trial on the APB Campus for two large residences – this is expected to save more than 4 million liters of water per annum.

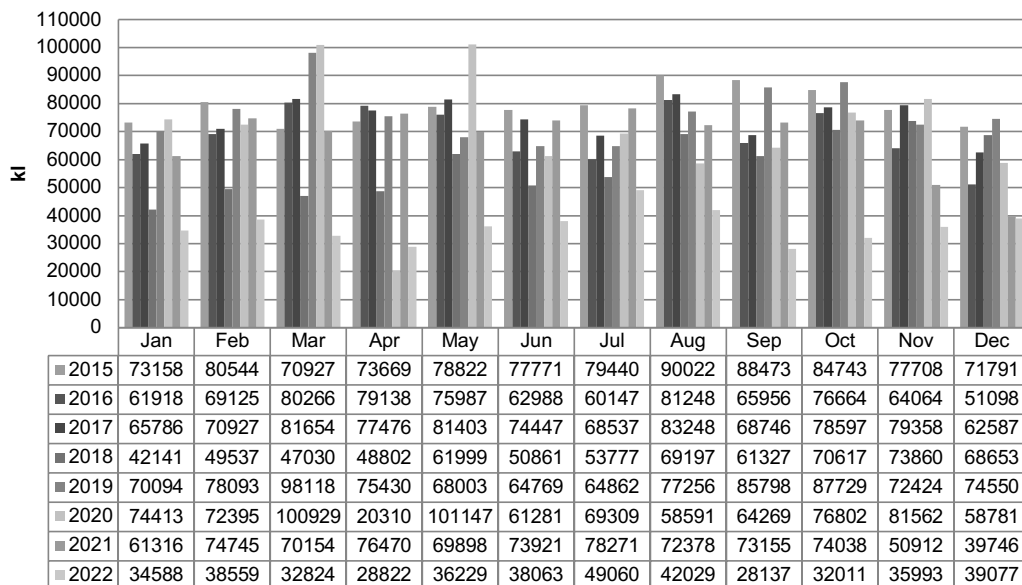


Figure 3: UJ total water consumption comparison from 2015 to 2022

WASTE MANAGEMENT

An analysis of the different types of waste generated in the reporting year is depicted below, while Table xx provides an overview of total waste generation compared to recycled waste. Interestingly, Table xx makes it clear that, in 2022, UJ recycled a substantially larger quantum of waste, which is admirable, but it must be

