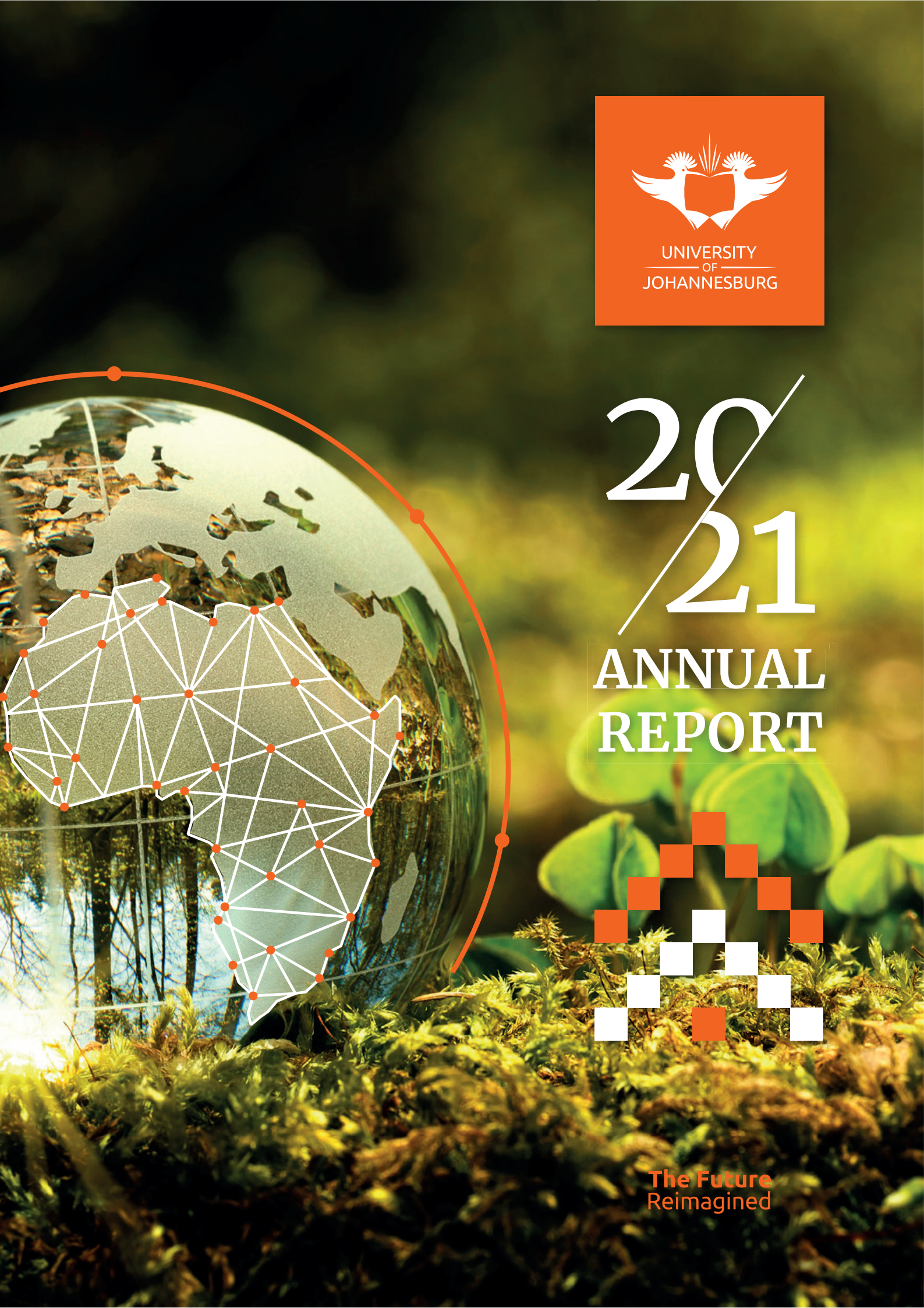
UNIVERSITY
OF
JOHANNESBURG
2021
ANNUAL
REPORT
The Future
Reimagined

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 2021.

ENERGY MANAGEMENT

Carbon footprint

UJ's carbon footprint analysis was based on its actual 2021 energy consumption. The total carbon footprint for 2021, based on energy consumption from various sources, is approximately 37 692 tons of CO_2 compared to the 41 403 tons reported during 2020 (refer to Tables 17 and 18, respectively). This indicates a decrease of approximately 8,96%. This can be attributed almost entirely to the continued effect of the various COVID-19 lockdown levels that were applied at various times during 2021 with the consequent reduction in foot traffic on all UJ campuses and off-campus facilities.

In considering this figure, the following should be noted:

- UJ has increased its built area footprint by 10,65% as from 2013.
- The Auckland Park Kingsway Campus continued to contribute significantly to the overall carbon footprint with 22 865 tons of CO_2 compared to the overall University footprint of 37 692.
- Infrastructure on the campuses is included in the consumption figures.
- The methodology of measuring the carbon footprint is based on absolute consumption on main campus areas, excluding UJ owned properties that are not designated as part of the campuses.
- It is the first time that reporting on power generation has led to a measurable decrease in the carbon generated by UJ – the decrease of carbon generated must also be seen against the 6,501% electricity generated by the solar PV plants. This must also be seen against the fact that at times the solar PV plant was not operating optimally because of the lighter foot traffic on the campuses – this will certainly not be the case in 2022.

WASTE MANAGEMENT

An analysis of the different types of waste generated in the reporting year is depicted below, while Table 21 provides an overview of total waste generation compared to recycled waste. Interestingly, Table 22 makes it clear that, in 2021, UJ recycled a substantially larger percentage of its total waste generated – which is admirable, but it must be noted that the absolute amount of waste increased after the very reduced value in 2020 but has not yet reached the pre-pandemic levels of 2019.

Table 21: Different types of waste recycled from January 2011 to December 2021

Month	Com Paper	White Paper	Plastic	Cans	E-Waste/ F-tubes	Card Boxes	Glass	Scrap Metal	Wet Waste	Garden Refuse	TOTAL	%
Total 2011	22.452T	26.934T	26.689T	13.742T	0.14T	37.427T	28.74T	29.803T	0	0	**188.71T**	3,9%
Total 2012	42.385T	41.505T	18.797T	9.45T	1.7T	56.417T	30.38T	11.108T	7.671T	0	**288.27T**	8,1%
Total 2013	39.46T	40.142T	18.028T	10.005T	1.21T	37.805T	18.793T	7.364T	14.2T	136.5T	**416.63T**	17,64%
Total 2014	40.088T	36.855T	19.615T	9.964T	1.44T	48.274T	13.93T	6.768T	36.22T	325.5T	**538.7T**	34,75%
Total 2015	31.579T	51.725T	20.335T	7.117T	0.17T	63.932T	31.521T	4.071T	15.16T	329.14T	**506.51T**	28,55%
Total 2016	53.681T	21.877T	34.056T	6.347T	0.11T	52.574T	16.218T	17.048T	18.68T	293T	**513.6T**	28,89%
Total 2017	40.667T	17.526T	42.149T	8.189T	6.08T	59.824T	27.062T	0.552T	4.61T	250.98T	**456.66T**	19,56%
Total 2018	37.016T	45.997T	44.592T	5.5515T	1.91T	40.346T	5.102T	1.34T	8.82T	263.14T	**521.48T**	22,54%
Total 2019	32.614T	43.121T	25.062T	5.908T	3.385T	41.16T	47.057T	4.051T	15.23T	407T	**625.33T**	33,65%
Total 2020	21.63T	17.98T	12.68T	2.58T	2.72T	31.58T	19.77T	10.26T	30.66T	524T	**673.86T**	47,81%
Total 2021	**13.952T**	**17.34T**	**6.31T**	**1.408T**	**3.112T**	**23.877T**	**22.317T**	**14.194T**	**12.506T**	**780T**	**895.016T**	**51,16%**

Table 22: Waste generated versus waste recycled – 2011 to 2021

Year	Generated	Recycled	Percentage recycled
2011	4 838.48	188.71	3,9%
2012	3 559.19	288.27	8,1%
2013	2 361.88	416.64	17,64%
2014	1 551.27	539.71	34,79%
2015	1 773.81	506.52	28,56%
2016	1 818.89	513.60	28,24%
2017	2 333.52	456.66	19,57%
2018	2 312.87	521.48	22,55%
2019	1 858.48	625.33	33,65%
2020	1 409.30	673.86	47,82%
2021	1 749.37	895.02	51,16%