NELSON MANDELA

UNIVERSITY







SUSTAINABILITY AND STEWARDSHIP INDICATORS

Produced by the Office for Institutional Strategy

SUSTAINABLE DEVELOPMENT DEFINED

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

(Source: Brundtland Commission Report, 1987)



STAFF TERMINATIONS 2022

ACADEMIC STAFF

REASONS FOR TERMINATION OF SERVICES	AFRICAN FEMALE	AFRICAN MALE	COLOURED FEMALE	COLOURED MALE	FOREIGN FEMALE	FOREIGN MALE	INDIAN FEMALE	INDIAN MALE	WHITE FEMALE	WHITE MALE	TOTAL
DECEASED			Ŷ								1
DISMISSAL INCAPACITY									Ŷ		1
DISMISSAL MISCONDUCT										t	1
OTHER					Ŷ	††	•				4
RESIGNED	*****	††††††	*†		•	ŧ	*	ŧ	***	t	23
RETIRED			Ŷ						Ŷ	Ť	3

PROFESSIONAL, ADMINISTRATIVE AND SUPPORT STAFF

REASONS FOR TERMINATION OF SERVICES	AFRICAN FEMALE	AFRICAN MALE	COLOURED FEMALE	COLOURED MALE	FOREIGN FEMALE	FOREIGN MALE	INDIAN FEMALE	INDIAN MALE	WHITE FEMALE	WHITE MALE	TOTAL
DECEASED	* *	†††	Ŷ						**		8
DISMISSAL INCAPACITY	•										1
DISMISSAL MISCONDUCT		††††									4
OTHER		Ť	Ŷ	ŧ		††			Ŷ	††††	14
RESIGNED		†††††	*†	††							27
RETIRED		Ť	Ŷ	ŧ					***		6

STAFF COSTS SOURCES OF INCOME AS % TOTAL RECURRENT EXPENSES 2020 COMPARED TO 2021 47.71% OWN FUNDING AS % INCOME (Other income/ total recurrent 52.28% 2020 2020 STATE SUPPORTED income) .56% INCOME (State appropriations/ Total recurrent income) 47.66% OWN FUNDING 52.33% AS % INCOME (Other income/ 2021 2021 total recurrent STATE SUPPORTED income) (State **55.15%** appropriations/ Total recurrent income)

OPERATING SURPLUS

The operating surplus reflects the operating surplus (Council-controlled income less Council-controlled expenses) as a percentage of Council-controlled income.



LIQUIDITY RATIO, I.E. CURRENT ASSETS/CURRENT LIABILITIES



Liquidity ratio is sound, as it far exceeds the expected norm of 2:1, meaning the University is able to pay its short term liabilities as they become due (although it went down compared to the 2020 ratio)

SUSTAINABILITY RATIO, I.E. CUMULATIVE RESERVES/ANNUAL EXPENDITURE



The sustainability ratio (total reserves) indicates the ability of the University to continue with operations without new funding in the next financial year. This is below the Council approved target of 1, but there is an improvement in the ratio from 2020.

SUSTAINABILITY DATA: INVESTMENTS & DONATIONS

Resources mobilised through the Strategic Resource Mobilisation and Advancement (SRMA) Office from 1 January - 31 October 2022.



HUMAN RESOURCE DEVELOPMENT SPEND

Amount spent on Human Resource Development for the period	VARIOUS SHORT LEARNING PROGRAMMES (as per ProSkill C)	R4 571 299		
1 January – 31 October 2022	SHARED SERVICES INTERVENTIONS	R648 652		
	UNIVERSITY CAPACITY DEVELOPMENT GRANT	R1 387 695		

ALUMNI DONATIONS: 2018 - OCT 2022

INCLUSIVE OF ALUMNI GIVING AND ALUMNI SUPPORTED PROJECTS



*Excludes alumni donations to the Convergence Fund (2020-2021) which were made directly into the Trust account. Future alumni donations (from 2022) will be made via a new donation platform linked to the Trust account which will allow alumni donors to receive tax certificates.

**The University's online donation platform was launched on 2 September 2022 - https://www.mandela.ac.za/giving-to-mandela-university

WATER USAGE 2019 - 2022

WATER CONSUMPTION MEASURED IN KILO LITERS PER M² OF USABLE SPACE FOR EACH CAMPUS



WATER CONSUMPTION MEASURED IN KILOLITRES PER STUDENT



ELECTRICITY USAGE 2019 - 2022

ELECTRICAL CONSUMPTION MEASURED IN KWH PER TOTAL GROSS M²



ELECTRICAL CONSUMPTION MEASURED IN KWH PER STUDENT



NOTE: Historic data for both Bird Street and Ocean Sciences have not been accurate and will be refined for inclusion in future statistics.

ENERGY CONSUMPTION PER CAMPUS 2022



The green energy generated (only on South Campus), is 1 544 235 kWh, or 17% of the energy for that campus.

M³ OF WASTE TO LANDFILL PER M² FOR ALL UNIVERSITY CAMPUSES

Cubic meter of waste (m³) generated per square meter (m²) of usable space on all the university campuses.



REPROGRAPHICS FROM 2007 - 2022



In line with the increased activity, students and staff on campus, the number of copies increased by almost a third in 2022. Although the university has moved onto electronic platforms for many of its functions, the examination process and related operations still require printing, as required by academic accreditation bodies.

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CARBON FOOTPRINT MEASURED IN METRIC TONS PER TOTAL GROSS M²

	CATEGORY 1: DIRECT GHG EMISSIONS AND REMOVALS tCO2e	CATEGORY 2: INDIRECT GHG EMISSIONS FROM IMPORTED ENERGY tCO2e	CATEGORY 3: INDIRECT GHG EMISSIONS FROM TRANSPORTATION tCO2e	CATEGORY 4: INDIRECT GHG EMISSIONS FROM PRODUCTS USED BY AN ORGANISATION tCO2e	CATEGORY 5: INDIRECT GHG EMISSIONS ASSOCIATED WITH THE USE OF PRODUCTS FROM THE ORGANISATION tCO2e	CATEGORY 6: INDIRECT GHG EMISSIONS FROM OTHER SOURCES tCO2e
2018	* 5 590	27 148	33 914	• 464		8 079
2019	6 644	25 686	34 639	558		7 418
2020	** 4 614	18 389	12 566	396		4 225
2021	5 726	19 099	10 152	272		14 087
2021						
STAFF	5 804	5 804	5 804	5 804	5 804	5 804
STUDENTS	30 178	30 178	30 178	30 178	30 178	30 178
M ² GROSS USABLE SPACE	227 709	227 709	227 709	227 709	227 709	227 709
TCO2E PER STAFF MEMBER	0.99	3.29	1.75	0.05		2.43
TCO2E PER STUDENT	0.19	0.63	0.34	0.01		0.47
TCO2E PER M ² USABLE SPACE	0.03	0.08	0.04	0.00		0.06

tCO2e: Tonnes (t) of carbon dioxide (CO2) equivalent (e). The tCO2e related to each of the SANS categories.

FUNDING FOR ENVIRONMENTAL SUSTAINABILITY PROJECTS 2023/24

RECEIVED FROM THE DEPARTMENT OF HIGHER EDUCATION AND TRAINING

PHOTOVOLTAIC SOLAR INSTALLATIONS ACROSS ALL CAMPUSES: بمر

R65 000 000

PLANNED FOR INSTALLATION 2023/24



ONGOING WATER EMERGENCY PROJECTS:

R 6 400 000

PLANNED FOR 2023

OCEAN SCIENCES:

Dry run protection – Campus pump

Campus pump housing



2ND AVE BOREHOLE:

Borehole controls/monitoring. Flow meter, borehole pump volume control

Borehole pump installation and campus pump housing

Dry run protection – Campus pump



NORTH CAMPUS BOREHOLE

MISSIONVALE

Planning around installation of isolation valves on campus

> Borehole controls/ monitoring. Flow meter, borehole pump volume control

STORAGE: Tanks 24 x 10 000L

Dry run protection – Campus pump

ENVIRONMENTAL SUSTAINABILITY FUNDING

RESIDENCES PHASE 3

Install new valve to isolate University from NMBM



Two new boreholes

Appoint a Geohydrologist

SOUTH CAMPUS RETURN EFFLUENT CONNECTION FOR HORTICULTURE:

Assess connection to horticulture reticulation + estimate

SOUTH CAMPUS CHLORINATION AND FILTRATION PLANT

R450 000



The cost of the installation included the supply and installation of a shipping container, system automation, water meter, 14 x 5000L tanks, 6 sand filters and 6 inline chlorinators.

The plant aims to filter and chlorinate the return effluent we receive from the Cape Recife Waste Water Treatment Works, that we currently use for irrigation. This water could then supply the South Campus with water during emergencies for at least flushing of toilets and basic general cleaning, although water for potable use and personal hygiene would have to be catered for and distributed to users from external sources.





