



ANNUAL REPORT: SDG REPORT

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UJ SDG REPORT 2023 SDG 12: RESPONSIBLE CONSUMPTION AND PRODUCTION



RESPONSIBLE CONSUMPTION AND PRODUCTION



Report on the University of Johannesburg's Contribution to Sustainable Development Goal 12 SDG 12: Responsible Consumption and Production

OVERVIEW: EXECUTIVE SUMMARY

This report outlines the University of Johannesburg's (UJ) to the United Nations' contributions Sustainable Development Goal (SDG 12) on Responsible 12 Consumption and Production during the 2023 academic year. UJ is committed to advancing SDG 12, which focuses on responsible consumption and production. In 2023, UJ implemented numerous initiatives aimed at reducing improving energy efficiency, waste. promoting sustainable sourcing, and fostering a circular economy. These actions are central to UJ's sustainability strategy, which is designed to reduce its environmental impact while educating future generations on the importance of sustainable practices.

Among UJ's key efforts in 2023 were its initiatives to expand its use of solar power, improve waste management, promote green transportation, and reduce paper consumption. These efforts are supported by UJ's commitment to circular economy principles, which emphasise the reuse and recycling of materials to minimise waste. Furthermore, the university integrated sustainability into its curriculum, research, and community outreach, with a particular focus on encouraging responsible consumption practices among students, faculty, and staff.

This report provides an in-depth review of UJ's contributions to SDG 12. It covers the university's major initiatives, specific achievements in 2023, and the long-term impact of its sustainability efforts, demonstrating how UJ is leading the way in creating a more sustainable, environmentally responsible, and resource-efficient future.

INTRODUCTION

SDG 12 is one of the key goals in the United Nations' 2030 Agenda for Sustainable Development. It emphasises the need for sustainable consumption and production patterns to ensure that natural resources are used efficiently and waste is minimised. The world is facing an increasing demand for resources due to urbanisation, economic growth, and population expansion, making SDG 12 particularly important in the context of global sustainability.

For UJ, the pursuit of SDG 12 is integral to its broader mission to promote environmental sustainability, reduce its carbon footprint, and contribute to sustainable urban development. UJ's efforts to promote responsible consumption and production are anchored in its strategic goals, which prioritise sustainability in its operations, research, and community engagement. The university has recognised its role in shaping a more sustainable future, both within South Africa and globally, by integrating SDG 12 into its academic programmes and encouraging staff, students, and stakeholders to adopt more responsible consumption habits.

This report details the key activities and initiatives UJ has undertaken in 2023 to promote responsible consumption and production. It explores how UJ has incorporated sustainability into its infrastructure, academic initiatives, and community outreach programmes, while also highlighting the importance of innovation, research, and industry collaboration in advancing SDG 12.

KEY ACTIVITIES AND INITIATIVES

UJ's commitment to SDG 12 in 2023 was reflected in various areas of its operations, including energy management, waste reduction, sustainable transportation, and promoting resource-efficient practices. Below, we explore the specific initiatives that UJ implemented to further the principles of responsible consumption and production.

These policies serve as the foundation of UJ's broader gender equity strategy and align with the university's goal of achieving a more equitable and inclusive institution. UJ's Transformation Unit, tasked with overseeing institutional transformation initiatives, has been central to the implementation of these policies. In 2023, the Transformation Unit collaborated with key stakeholders across the university to assess existing gender imbalances and propose solutions to enhance women's representation, particularly in leadership positions.

1. Energy Management and Carbon Footprint Reduction

A key area where UJ has made significant progress in responsible consumption and production is energy management. The university has made strides in reducing its reliance on non-renewable energy sources, significantly lowering its carbon footprint, and increasing the use of renewable energy. In 2023, UJ continued its investment in solar photovoltaic (PV) systems, which have become a cornerstone of its strategy to reduce its energy consumption and environmental impact. By the end of 2023, UJ had expanded its solar energy capacity to 2 MWp, contributing to the university's goal of achieving carbon neutrality by 2050.

The university's efforts to reduce energy consumption were also reflected in the implementation of energy-efficient technologies across its campuses. UJ installed LED lighting, motion-sensing lights, and energy-efficient air conditioning systems to optimise energy use. These initiatives helped reduce energy costs and improve operational efficiency, making the university more sustainable. UJ also continued to use smart building technologies to monitor and manage energy use across its facilities, ensuring that energy consumption is optimised and waste is minimised.

Moreover, UJ's efforts in energy conservation were supported by awareness campaigns that encouraged students and staff to adopt energy-saving practices in their daily routines. Through digital platforms and campus-wide initiatives, UJ educated its community on the importance of energy conservation and provided practical tips on how to reduce energy consumption.

2. Waste Management and Circular Economy

Responsible production and consumption are closely linked to effective waste management practices. UJ has long recognised the importance of reducing waste and promoting recycling as central pillars of sustainable development. In 2023, UJ continued to focus on minimising waste generation through efficient waste management strategies and increasing its recycling rates. The university successfully implemented on-campus waste sorting stations, where students and staff could easily separate recyclables from general waste. This effort has contributed to a steady increase in the university's overall recycling rate, which reached 39.3% in 2023, despite the challenges posed by a return to full campus operations.

In addition to traditional recycling programmes, UJ embraced waste-to-energy technologies and composting practices. In 2023, UJ introduced composting bins on several campuses to recycle organic waste, such as food scraps and garden waste. This initiative contributed to reducing the amount of organic waste sent to landfills while providing a valuable resource for UJ's gardens and green spaces. Additionally, UJ's ewaste recycling programme helped to properly dispose of old electronics, preventing harmful chemicals from contaminating the environment.

Moreover, UJ worked to foster a circular economy on campus, focusing on the reuse of materials and minimising the use of disposable items. The university's paperless initiatives encouraged the use of digital communication, e-books, and online resources, significantly reducing paper consumption across all faculties. UJ also encouraged the use of reusable containers and sustainable products during events and conferences, promoting eco-friendly alternatives to single-use plastic.

3. Sustainable Transportation and Green Mobility

Transportation is another area where UJ has made significant contributions to SDG 12. In 2023, UJ continued to develop its green mobility programme, which includes the promotion of electric vehicles (EVs) and sustainable transport options on campus. UJ's electric bus fleet became a flagship initiative in this regard, with the university expanding the number of electric buses serving its campuses. These buses reduce the university's reliance on fossil fuels, cutting emissions and contributing to a more sustainable urban environment.

The electric vehicle initiative is part of UJ's broader strategy to provide sustainable mobility options for its students and staff. The university has invested in the installation of charging stations for electric vehicles on campus, ensuring that the infrastructure is in place to support the growing adoption of EVs. In 2023, UJ also encouraged students and staff to use cycling as a sustainable form of transportation by improving bicycle lanes and providing secure bike parking. This initiative helps reduce traffic congestion and minimises the environmental impact of commuting.

4. Sustainability Education and Research

UJ's academic programmes and research activities also play a central role in promoting SDG 12. The university integrates sustainability principles into its curriculum, ensuring that students are equipped with the knowledge and skills to engage in responsible consumption and production practices. In 2023, UJ introduced new courses and short programmes that focused on sustainable business practices, green manufacturing, and sustainable urban development.

Additionally, UJ's research activities have been instrumental in addressing challenges related to sustainable production and consumption. The Research and Innovation Division facilitated several key research projects aimed at exploring sustainable practices in industry and urban environments. Notably, UJ's research on green technologies and circular economy models has led to the development of innovative solutions for waste management, energy conservation, and resource efficiency. UJ's collaboration with industry partners has allowed the university to translate its research findings into actionable solutions that promote more responsible consumption and production.

UJ's commitment to sustainable development research extends beyond campus boundaries, with faculty and students involved in projects that address the environmental challenges faced by communities. Through initiatives such as the Sustainability Research Alliance, UJ has worked with local municipalities and businesses to develop sustainable solutions for urban waste, water management, and renewable energy.tips on how to reduce energy consumption.

CONCLUSION

In 2023, the University of Johannesburg made remarkable progress in contributing to SDG 12 on Responsible Consumption and Production. Through its extensive initiatives focused on energy efficiency, waste reduction, sustainable transportation, and responsible resource use, UJ has played a critical role in promoting sustainability on campus and in the surrounding communities.

Looking forward, UJ is committed to expanding its sustainability efforts, with plans to further reduce its carbon footprint, increase recycling rates, and promote the circular economy. The university's ongoing focus on sustainable infrastructure, education, and research will continue to drive its contribution to SDG 12 and the broader global sustainability agenda.

UJ remains committed to embedding sustainability across all aspects of its operations, ensuring that future generations of students are equipped with the knowledge and tools to engage in responsible consumption and production practices. Through innovation, collaboration, and continued dedication, UJ will continue to lead the way in creating a more sustainable and environmentally responsible future.

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