



12.3.2 Indicator: Proportion of waste recycled in academic year 2023-2024

Type of Waste	Amount of Waste Generated (mt)	Amount of Waste Reused / Recycled (mt)	Amount of Waste Sent to Landfill (mt)
Organic Waste	0.26	0.05 (+ 0.02 down-cycled + 0.03 up-cycled)	0.21
Inorganic Non-Toxic Waste	207.7	102 (39 reused + 28 down-cycled + 35 up-cycled)	105.7
Paper	65.5	37 (28 reused + 5 down-cycled + 4 up-cycled)	28.5
Plastic	142.2	65 (11 reused + 23 down-cycled + 31 up-cycled)	77.2
Total	273.46	169.05	104.41



Total volume of paper and plastic produced this year

Type of waste	amount (ton)		
	Produced		reduced
	Last Year 2023	This year 2024	
Plastic	12	142.2	
Administration building	10	19	
Central Laboratories Building	NA	1.2	
Medical Sciences Building (A)	NA	32	
Medical Sciences Building (B)	NA	39	
Engineering Sciences Building (C)	2	24	
Engineering Sciences Building (D)	NA	27	
Paper	15	65.5	
Administration building	12	28	
Central Laboratories Building	NA	0.5	
Medical Sciences Building (A)	NA	17	
Medical Sciences Building (B)	NA	11	
Engineering Sciences Building (C)	3	4	
Engineering Sciences Building (D)	NA	5	

Description:

The total volume of paper and plastic waste increased in 2024 compared to 2023.

This increase is due to the natural growth of the university, as in 2023 only two faculties (Engineering and Computer Science) were operating with a limited number of students, academic staff, and administrative employees.

During the 2023–2024 academic year, additional faculties were opened, resulting in a larger university population and consequently a higher level of paper and plastic consumption.

This expansion had a noticeable effect in 2025, when the total waste volume reflected the continued institutional growth and broader academic activities.

However, the university remains strongly committed to sustainable waste management practices, with ongoing initiatives to reduce, reuse, and recycle materials to minimize its environmental impact.



Total volume organic waste produced this year

Type of waste	amount (ton)					
	Produced		reduced	Treated		
	Last year 2023	2024		reused	down-cycled	up-cycled
organic	0.28	0.26	0.02		0.02	0.03
- food waste	NA	NA				
- garden residue	0.28	0.15	0.13		0.02	0.03
-Biological residue from lab	NA	0.11				

Description:

In the academic year 2022/2023 & 2023/2024, the university had not yet contracted with a cafeteria operating on campus, which explains the absence of recorded food waste during that period.

In the academic year 2022/2023, only the Faculties of Engineering and Computer Science were operating; therefore, no biological waste was generated during that period.



Total volume inorganic waste produced this year

Type of waste	amount (ton)					
	Produced		reduced	Treated		
	Last year 2023	This Year 2024		reused	down-cycled	up-cycled
inorganic non-toxic	27	207.7		39	28	35
- paper	15	65.5		28	5	4
- plastic	12	142.2		11	23	31

Description:

At Menoufia National University (MNU), there has been a significant increase in inorganic non-toxic waste generation from 27 tons in 2023 to 207.7 tons in 2024, reflecting the expansion of campus activities and facilities. This category mainly includes paper and plastic waste, which recorded notable rises in quantities — paper waste increased from 15 tons to 65.5 tons, and plastic waste from 12 tons to 142.2 tons during the same period.

Despite the increase in total waste produced, MNU has implemented effective waste treatment and recycling strategies. In 2024, the university successfully treated inorganic waste through reuse (39 tons), down-cycling (28 tons), and up-cycling (35 tons). Specifically, paper waste was reused (28 tons), down-cycled (5 tons), and up-cycled (4 tons), while plastic waste was reused (11 tons), down-cycled (23 tons), and up-cycled (31 tons).

These data highlight MNU's growing commitment to sustainable waste management and resource recovery, emphasizing its efforts to minimize environmental impact through recycling and material revalorization initiatives.

MNU is a newly established institution that produces very limited or negligible amounts of toxic waste, as most educational and research activities rely on digital technologies, Anatomage systems, and dental simulators, which do not generate chemical or biological hazardous waste. Any small quantity of potentially toxic material is properly sterilized (e.g., using autoclaves) and disposed of safely through authorized waste management channels, ensuring full compliance with environmental standards.