THE UNIVERSITY OF MANCHESTER

ENVIRONMENTAL SUSTAINABILITY COMMITTEE

1st MAY 2024

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EXECUTIVE SUMMARY
This report summarises the methodology used to set a water reduction target alongside a brief of the water reduction measures.

APPROVED TARGET:
To reduce our water consumption 15% by 2028 using 2022 as a baseline.

DETAIL OF REPORT

In the Environmental Sustainability Strategy 2023-2028, we committed to maximise the efficiency in our resources management and water is one of those resources. We aimed to improve water metering to provide greater clarity on consumption and opportunities for increased efficiency and a potential reduction target. The Energy Team has monitored the water consumption across campus by obtaining consumption data from water bills and on-site water meters. We are now having a clear idea of our consumption, so it is desirable to set a reasonable water reduction target to demonstrate our commitment on efficient use of resources.

Our pre-COVID water consumption was about 800,000 to 900,000m^3 each year. The water consumption was found exceptionally high in 2018, due to some leak in underground pipes. From 2022 to 2023 whilst most of the campus activities resumed, we use about 750,000m^3 of water annually. Figure 1 shows our water consumption from 2018 to 2023:

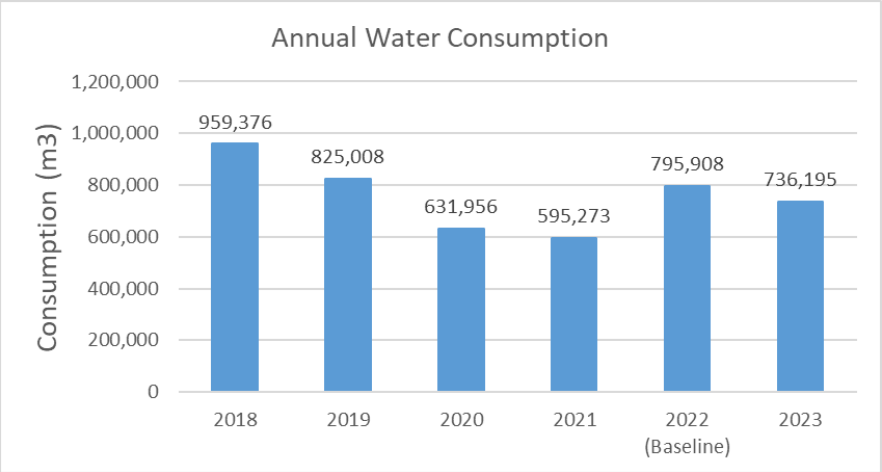

Figure 1. Annual water consumption from 2018 to 2023

In 2023, we recorded an 8% decrease in our water consumption when compared with 2022, mostly driven by the North campus decant, leak detection and repair, and the acquisition of low water consumption equipment. We don't have approved budget on large scale water reduction works in the next few years. Therefore, we can only rely on our current actions plus behavioural change to achieve water saving across the whole campus. It is considered that, an achievable target on water reduction could be set for the next five years.

Our target: Reduce our water consumption by 15% by 2028 using 2022 as a baseline.

The East campus and residences contributed to 40% and 27% of total water consumption of the University respectively. Therefore, focussed effort to reduce water leak and consumption across main campus and residences will be required.

Our water reduction measures

- Detect, monitor and repair leaks
- Replace inefficient water equipment with higher efficiency ones throughout our construction and refurbishment activities in both residences and main campus buildings
- Achieve water reduction in laboratories through LEAF implementation
- Communicate and encourage water saving behaviours to staff and student
- Track our water consumption monthly and report to ESC quarterly

Sarah Choi, Environmental Sustainability Manager, 1st May 2024.