

WaterWise Initiative

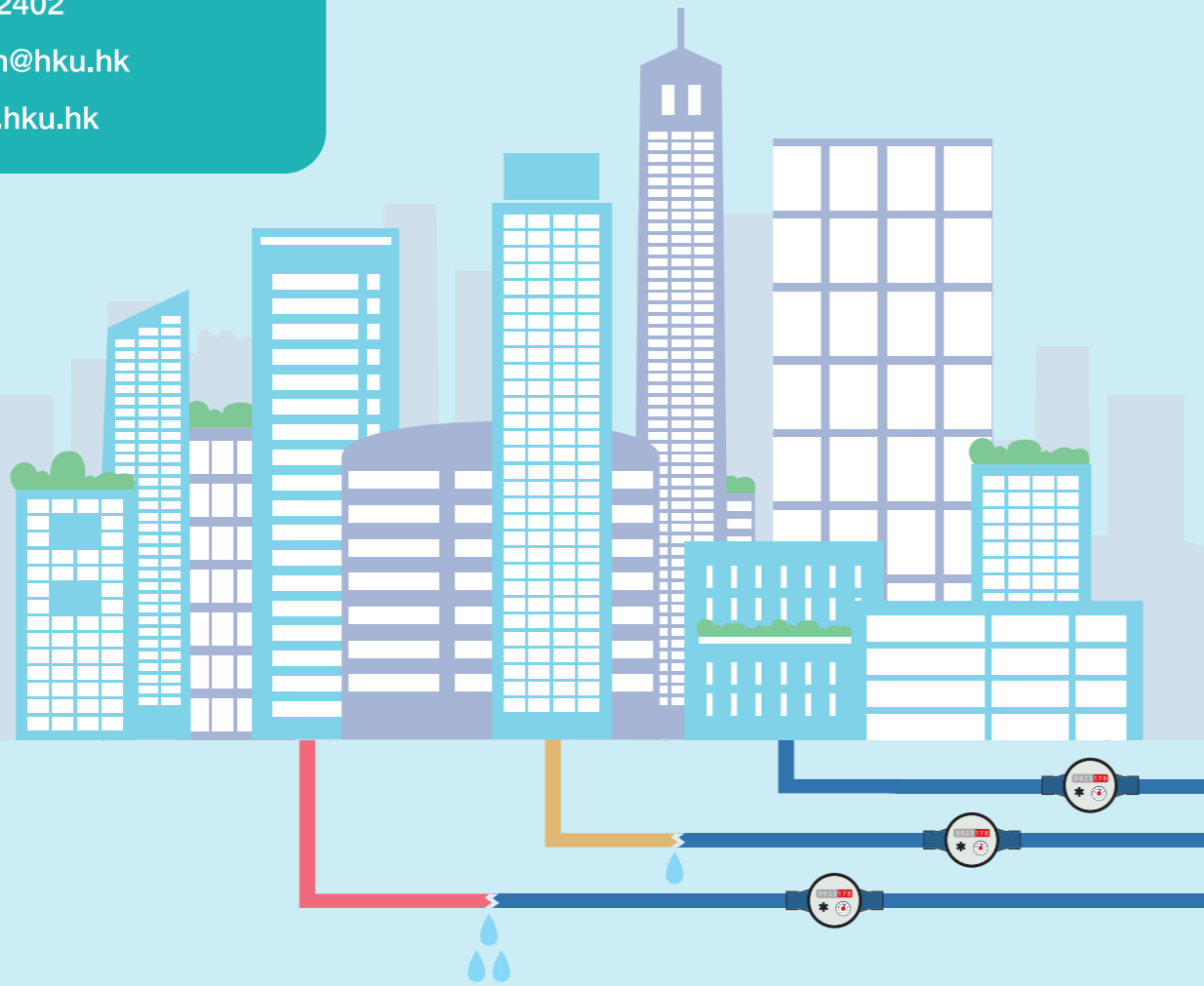
for Commercial Buildings

Application closes on
30 November 2023

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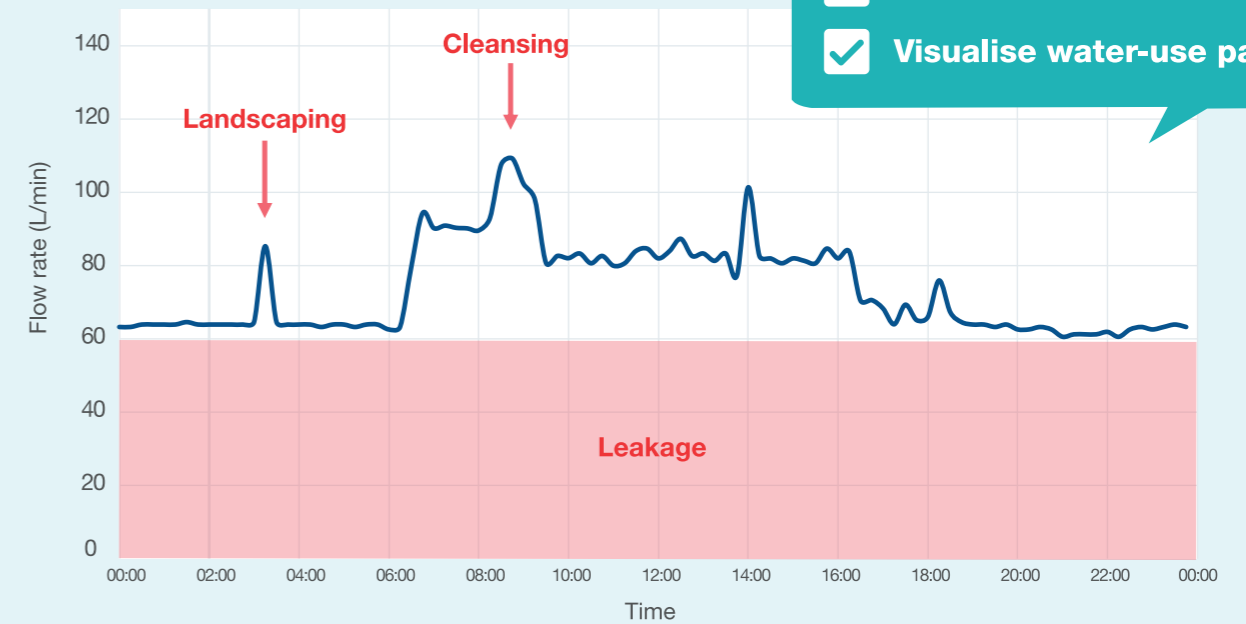


Project objective

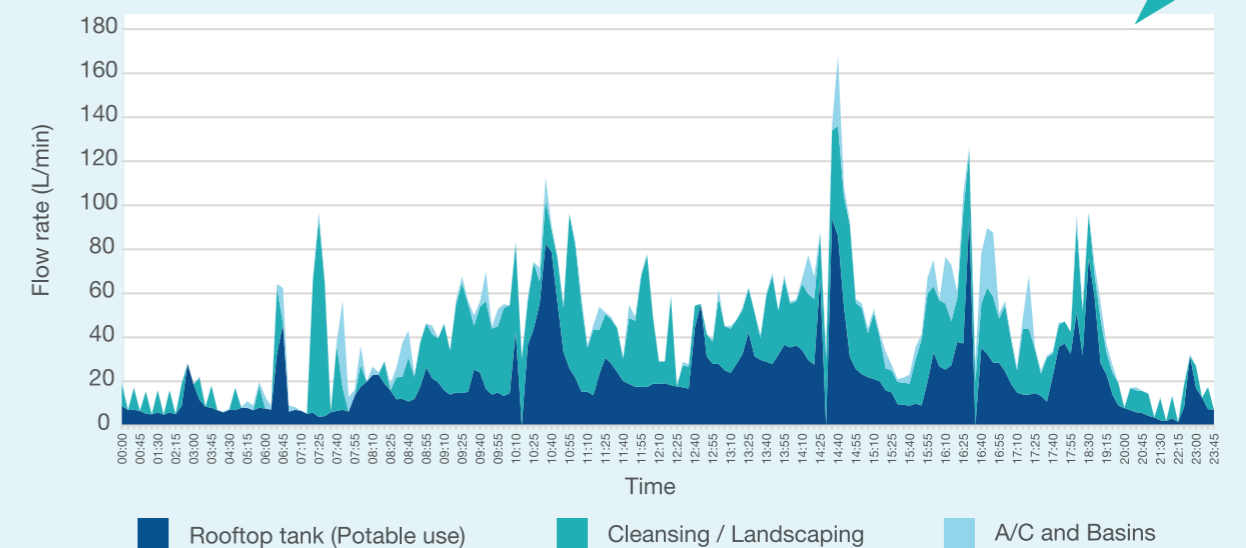
To help commercial building managers to **detect leaks** and **identify high usage activities** by digitalising water meter data.

Why digitalise water meter data?

24-hour fine-grained flow profile



Breakdown by type-of-use (for buildings with multiple meters)



Co-organised by:



Department of Electrical and
Electronic Engineering
電機電子工程系



水資源技術與政策研究中心
Centre for Water Technology and Policy
香港大學 The University of Hong Kong



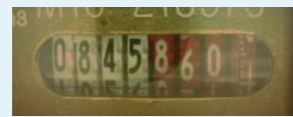
The WaterWise Initiative is supported by the HKU Knowledge Exchange Fund granted by the University Grants Committee.

Targeted buildings

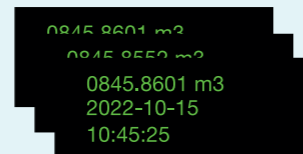


Programmatic activities

1 Install smart water meter (March 2024) Retrofit existing water meter



Mechanical meter reading



Time-stamped digitalised data

Before



After

FAQs

Do the devices require water meter or pipe alterations?

No. The devices use a clamp-on, non-invasive design. They retrofit existing water meters and do not require any pipe alterations.

Do the devices require power supply from the building?

No. The devices are powered by dry-cell batteries.

What assistance is needed from the participants?

Indication of the location of the water meters is needed. Assistance may be required during a step-test to identify the leaking pipes.

Is the Water Supplies Department informed about the installation?

Yes. The Water Supplies Department supports this project.

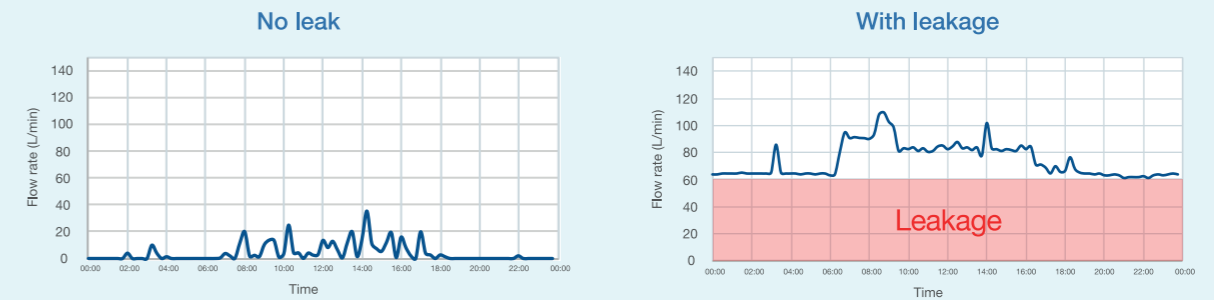
Will participants be responsible for the operation and maintenance of the devices?

No. The HKU Water Centre will be responsible for the operation and maintenance of all devices.

Is the installation permanent?

No. For premises without any leakages, all devices will be removed after a 2-week data collection period. For premises with leakage issues, the devices will remain in place until a step-test is conducted.

2 Data analytics and data visualisation (March – May 2024) Data will be plotted into a 24-hour flow profile



FAQs

How can participants access the data?

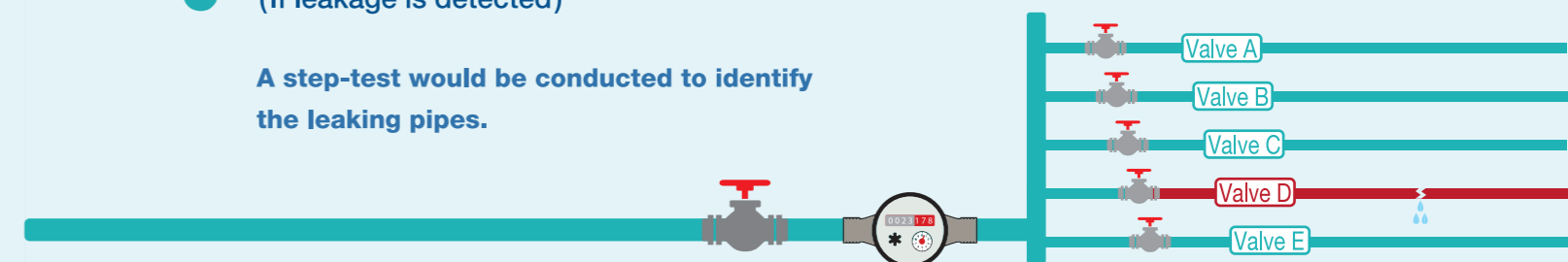
The HKU Water Centre will provide a raw dataset and a summary report to the participants after the data collection period.

Will the participants' data be kept confidential?

Yes. All the data will be treated with strict confidentiality.

3 Follow-up actions (May 2024) (If leakage is detected)

A step-test would be conducted to identify the leaking pipes.



4 Evaluation workshop (June 2024) Data will be used to formulate effective and targeted water conservation measures

Benefits

- Water and cost savings
- ESG performance enhancement

- Green building certification
- Industry benchmarking