

# ECO SHOWER

## PROJECT OBJECTIVES

This project aims to develop an intelligent system to help consumers save water and energy.

## PROJECT SUMMARY

Water and energy used in buildings are linked to each other. Water is heated up with electricity or gas for use; water also has to be purified and pumped to the premises.

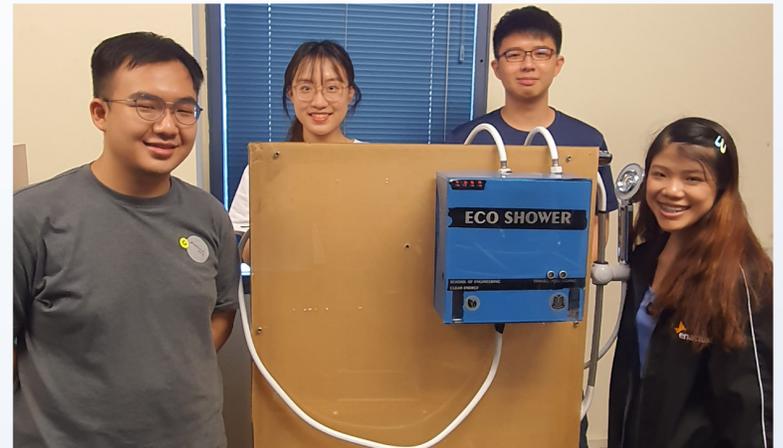
This project aims to design and fabricate a user-friendly smart shower system that will help lower water and energy consumption in homes. The system is designed such that water will flow out of the shower head only when the water is warm, thus reducing unnecessary hot water wastage. During the shower cycle, water is saved by having two types of water flow: misting shower before soaping and normal water flow during rinsing. While soaping, water flow will stop automatically.

Ultimately, the project aims to instil discipline among consumers by rationing water to an appropriate yet comfortable amount per shower session. This helps to save water and energy.

## PROJECT OUTCOMES

This project has the following advantages:

- Portable and compact - Can be installed inside homes.
- Minimal water and energy wastage - The system tracks the amount and temperature of water to be used.
- User-friendly - The user needs to operate only three switches: (i) soaping; (ii) rinsing; and (iii) stop, with the control circuit taking care of the rest.
- Easy to install.
- User-monitoring can be done via an app.



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