The lack of clean drinking water is a problem that plagues many nations in the world today. Long-term storage of water in plastic bottles lead to BPA adulteration. Most of the current technologies available to combat this problem are expensive and consume too much power. The use of chemical processing mechanisms for purification is an affordable solution, but it has been known to be hazardous if used improperly.

With the idea of low cost and sustainability in mind, the team has developed a water filtration system that uses natural energy to power the purification system.



## **Features**

- The filtration system: Water flows through 3 carbon filters, a high-pressure pump, RO system, and a UV purifier of 11 watts and also has UV-fail alarms
- Photovoltaic technology is used to charge a battery backup system
- Filteration system requires a power input of 12V, which is given either by solar battery or car battery
- The unused water is redirected to windshield wiper reservoir in cars and a separate reservoir in bikes

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PORTABLE RO PURIFIER

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