

HACK THE MOUNTAIN

GREEN QUEEN

TEAM MEMBERS:-

ANSHI SRIVASTAV

AVISHKA KARN

JIYA GARG


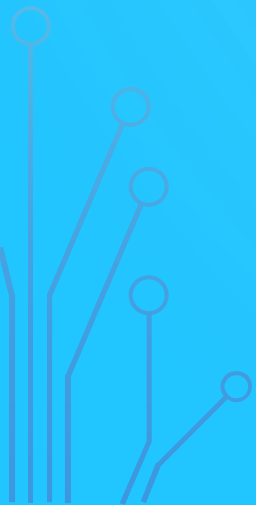
KIRTI MORYA





NEER SANCHAY

How much water of reverse osmosis system is useable ?



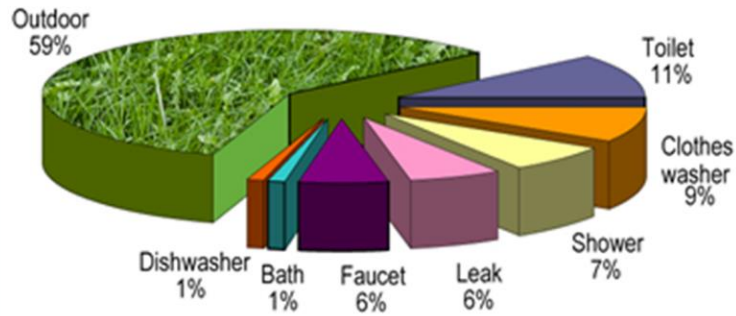
PROBLEM STATEMENT

- In Reverse Osmosis (R.O system) each 1L of water that is cleaned discharges about 3L of effluent.
- This grey water has high amount of TDS so can be used practically anywhere other than for drinking .



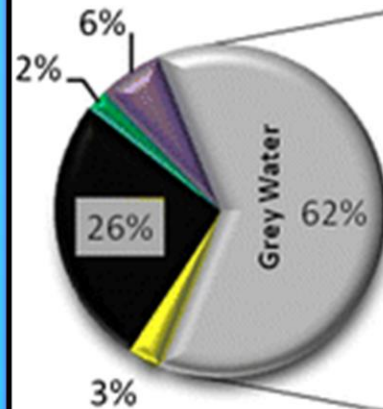
STATS – USAGE OF WATER IN DAILY BASIS

Residential Average Water Use

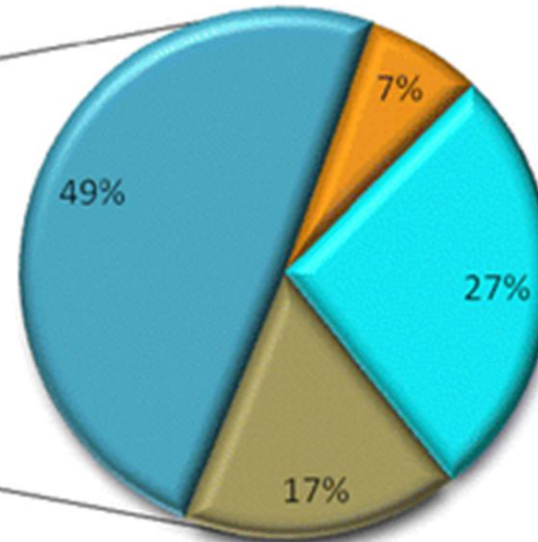


Source: American Water Works Association Research Foundation, End Uses of Water

Total Water Consumption



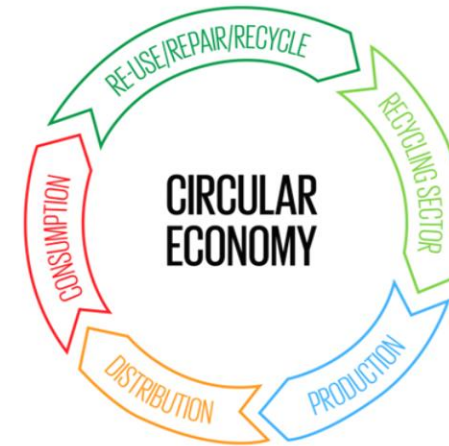
Grey Water Production



- Drinking and Cooking use
- Toilet Flushing
- Gardening Irrigation / Others
- Washing and Cleaning of house
- Shower and bath
- Hand basin
- Laundry
- Kitchen/Dishwashing

CIRCULAR ECONOMY

- Through the concept of circular economy which aims at converting waste into new raw material , we can repurpose the grey water for diverse purposes like cleaning , washing and gardening.



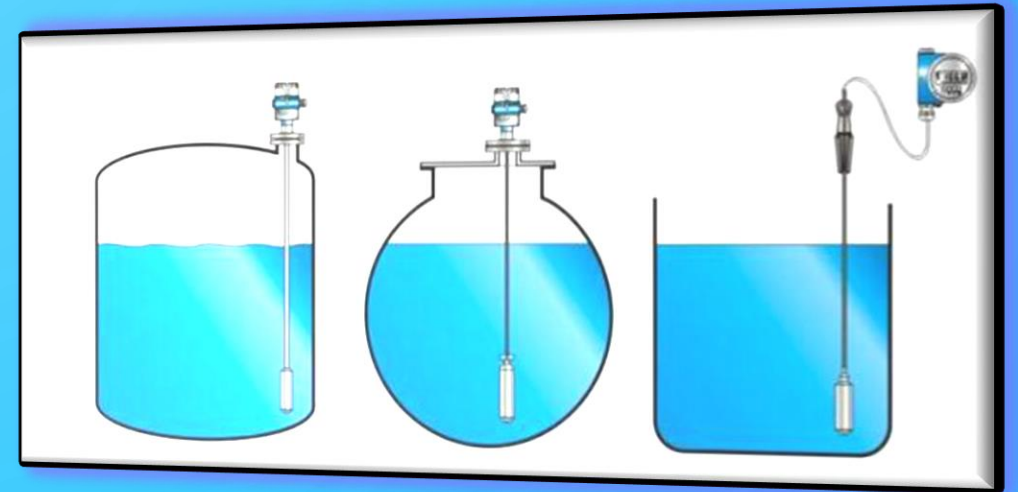
NEER-A WAY FORWARD

- We have ideated to develop NEER to minimize the wastage of grey water generated from RO purifiers.
- 10T controlled system equipped with sensors and pipelines.
- It can collect ,store and direct water for various purpose.



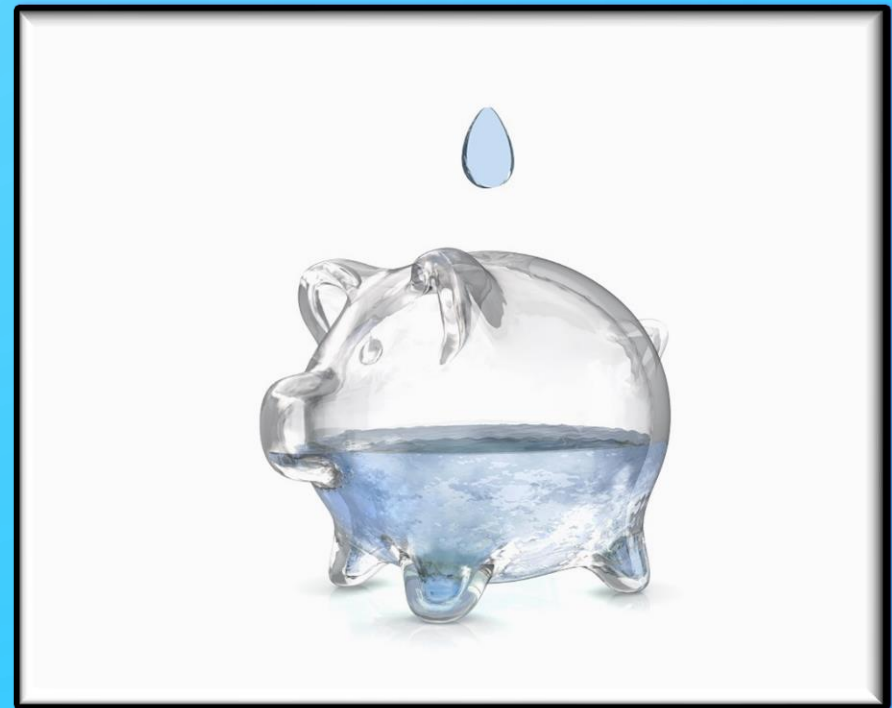
HOW WILL IT WORK?

- The tank will be filled with the ejected waste water upto the red mark.
- As per demands, the outlets valves of pipes(one at a time) will open and release water .
- The automated valves will control the opening and closing of pipes depending on the needs.



DEALING WITH PRICE CONFLICT

- At the present sensors prices , the bucket would cost less than Rs 1000.
- Every home RO system could be integrated with its compact version.



LEADING TO SUSTAINABLE FUTURE

- Uses of this bucket will reduce wastage of water and time .
- Minimize human efforts and errors.
- Reduce direct dependence on fresh water.
- Cost effective

The image features a solid blue background. In the four corners, there are decorative white line art elements resembling circuit boards or neural networks, with lines and small circles connecting them. A large, white-outlined rectangle is centered on the page, containing the text.

It has tremendous
potential to contribute to
building a sustainable
future