

# The Reclaimer

Today, 3.6 billion people lack access to safely managed sanitation. Traditional wastewater treatment requires significant, expensive infrastructure. By 2050, a 30% increase in global water demand is anticipated; yet despite increasing water scarcity, globally, we have a preference for flush toilets. To meet these challenges we have developed **the Reclaimer**: a compact, onsite wastewater treatment technology for buildings and homes that requires no water or sewer hookup and enables treated wastewater to be re-used in flush toilets.

## Key features

- Continuous, automated operation
- <10 minute per flush processing time
- Designed to treat blackwater to ISO 30500 standards
- No water or sewer hookup required
- Scalable
- Energy usage: 20-30 Wh/L
- Life expectancy: 10 years (estimated)
- Annual maintenance for filter replacement
- A complete sanitation solution when paired with solids digestion or containment

## Performance

The Reclaimer is designed to treat between **500-1,000 L/day**, approximately **80-160 uses/day**.



## Process

The Reclaimer is designed to receive settled and/or coarsely filtered blackwater (>99% of toilet waste by volume) and treat it with a four-stage process:

### 1) Ultrafiltration

Removes suspended solids  
Automated backwash (prolongs filter)

### 2) Granular Activated Carbon

Removes soluble organics

### 3) Zeolite

Removes ammonia

### 4) Electrochemical Oxidation

Removes pathogens



Designed to treat blackwater to ISO 30500 standards, treated water can be re-used for multiple purposes, including flushing, irrigation and laundry.



## Use Cases

The Reclaimer can be scaled to meet demand for wastewater treatment in individual and multi-family homes, buildings, dormitories, communal ablution blocks, informal settlements, refugee camps and mobile treatment units. The technology measures 1m (w) x 1m (l) x 2m (h).

## Stage of development

- First generation prototypes have undergone 1+ year of lab and field testing
- Second generation prototype has undergone field testing since October 2021
- Technology has been licensed by a company in India
- Multiple installations planned for 2022-2023
- Seeking manufacturing partners to develop local supply chains

### For more information

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