

# Technical Brief

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## A Deployable Toilet System: A toilet for a non sewer system

### Technology Summary

A deployable toilet system that offers pathogen and odour free discharge by thermophilic operation of the septic tank, with less water consumption. The modular toilets are easy to assemble on-site.

### Background

A recent survey by the Union Ministry revealed that more than 21% of rural households in India lacked access to any type of toilet facility. The toilet facilities include exclusive household latrines, communal facilities, or community toilets. Moreover, there is no proper method for disposal of the waste water. Thus, there is a strong need to develop a sanitation safe, pathogen and odour free deployable toilet system, that is affordable, portable, and works with minimal water consumption.

### Technology Description: Key Features

- On-site installation and ready to use modules with 3 components: septic tank, a component housing unit and solar / PV panel.
- Filtration unit for recycling of waste water to flush tank: the system has electronic system intervention and components are available off-the shelf in the market, hence cost effective.
- Biogas combustion integrated with heat exchanger Toilet Pot manufactured from E-waste material using injection moulding process.

### Market Potential

Portable Toilets Market is projected to reach a market value of US\$ 9,851.4 million by the end of 2025. The portable toilets industry has foreseen a growth due to rising awareness regarding proper sanitation practices among consumers coupled with fast adoption of mobile toilets especially at outdoor events.

<https://www.adroitmarketresearch.com/industryreports/portable-toilets-market>

### Application

- Movable hygienic toilets for outdoor events
- Easy to assemble and install in villages

### Value Proposition

- Modular, separable and easy to assemble toilet system
- Filtration unit for recycling of waste water to flush tank
- Toilet pot developed from E-waste material
- Cost effective

### Technology Status

- The technology is available for licensing
- Proof of concept achieved

