

## DRY COMPOSTING TOILETS

### What is a dry composting toilet?

A dry composting toilet is not a latrine. It is a toilet that treats human waste through composting without the use of water.

### Why are they better than flushable toilets?

- With more than half the people in the world affected by water scarcity, conserving water is essential. In Costa Rica, a family of five will use an average of 24,000 litres of water every month. Flushing toilets contributes to 28% of this monthly consumption. This means that on average, a family of five will flush approximately 197 litres of potable water down their toilets every day. Flushable toilets use an average of 9 liters of water per flush, depending on the type of toilet. On the other hand, dry composting toilets use no water.
- The waste is transformed into a resource for agriculture through the composting process.
- Dry composting toilets also eliminate the need for a septic tank.



### What's the difference between septic tanks and dry composting toilets?

- Septic tanks hold dangerous bacteria and toxic waste that can leak, while the composting process destroys any dangerous bacteria.
- Unlike toilets connected to septic tanks, this process is aerobic (which means it uses oxygen) and emits carbon dioxide. Septic tanks emit methane which is about 23 times stronger than carbon dioxide in warming the atmosphere.
- Septic tank waste can pollute rivers when not disposed of properly, while compost can safely be returned to the environment once it is fully broken down.



### How do they work?

Waste enters the dry composting toilet the same way as a flushing toilet. Since the designs require little to no water, it relies on gravity instead of water to move the waste. The waste will break down within the tank. Additives, such as sawdust and leaves, aid the composting process. After sitting for a minimum of one year, the compost can be used as fertilizer for vegetation.

## What are some common misconceptions about composting toilets?

Disposing of waste through sewage systems is a lost opportunity to reuse a valuable resource. Society's misconceptions serve as one of the greatest obstacles for widespread use of dry composting toilets.

**Fiction:** Human waste is unsafe to use as compost.

**Fact:** When given the proper amount of time to compost, all the harmful bacteria in human waste is killed.

**Fiction:** Because there is no water, dry composting toilets are unhygienic.

**Fact:** There is no scientific evidence supporting that the use of water is more sanitary.

**Fiction:** Dry composting toilets are just latrines.

**Fact:** Dry composting toilets are more technologically advanced than latrines and can be installed indoors.

**Fiction:** Dry composting toilets can't be inside.

**Fact:** They can be built outside in free-standing structures or installed inside a home or other building.

**Fiction:** Dry composting toilets smell bad.

**Fact:** When ventilated and maintained properly, composting toilets have no more odor than a flushable toilet.

# COMPOSTING TOILETS

An eco-friendly alternative to flushing toilets

## FLUSHING TOILETS WASTE WATER

For a family of five, the average amount of water wasted from flushing toilets is:



**28% OF TOTAL WATER USE IS FROM FLUSHING TOILETS**

(Rico, 2015)

Composting Toilets reduce toilet water usage by

100%

## What could you do with 72,000 litres of water?

**90 YEARS** of adequate drinking water for the average female

**480 SHOWERS** per 150 litre shower

(Kleiner, 1999) (Rico, 2015)

## COMPOSTING TOILETS PROTECT THE ENVIRONMENT

**97.5%**

OF MONTEVERDE RESIDENTS HAVE SEPTIC SYSTEMS

**97.8%**

DISCHARGE GREYWATER DIRECTLY INTO THE ENVIRONMENT, DESPITE LAWS

(Brown, King, Papa, Seillac, & Syvertsen, 2008)

Composting Toilets SAFELY and NATURALLY treat waste!



Nutrients from waste are returned to the soil

## How do I get started?

You can be part of the solution to climate change! By installing a composting toilet, you can contribute to the trend of environmentally conscious decisions. For more information about dry composting toilets, check out the composting toilet instructional manual.

## Sources

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