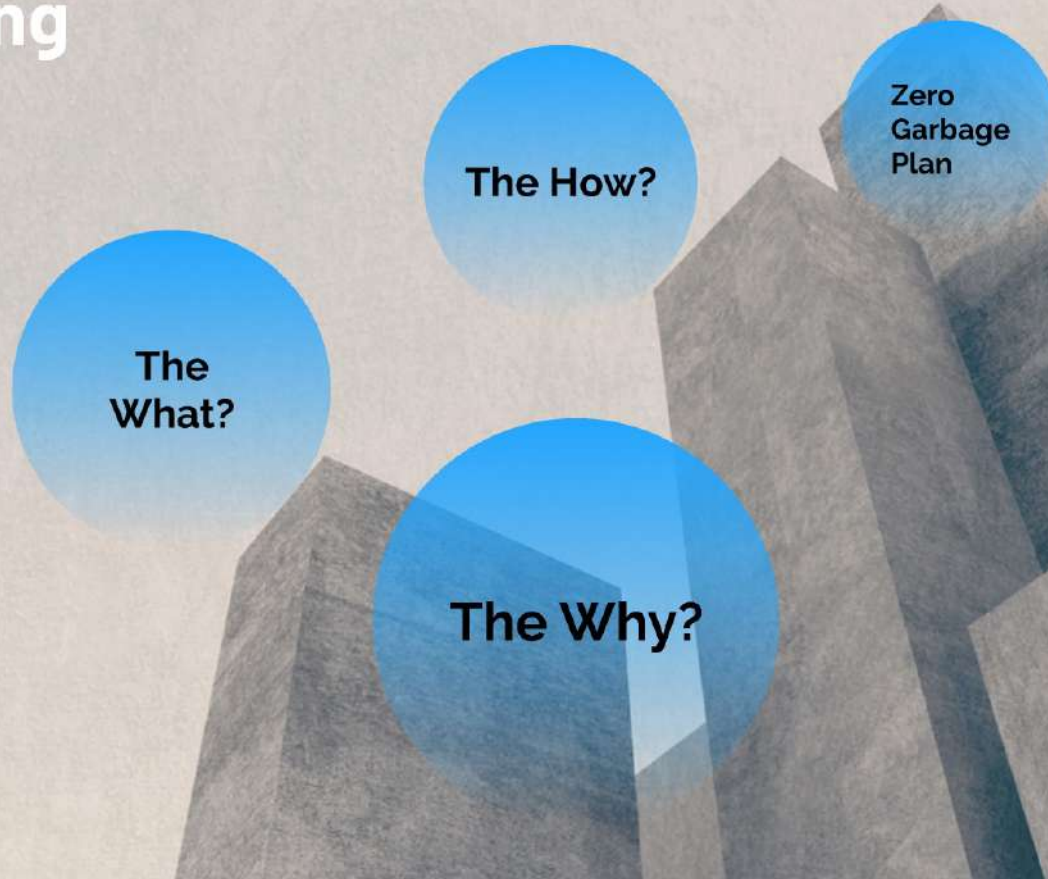


# TALLBOY® Composting

by RITEWAYS



# Why compost?

SDG

Enforce

+ / -

# SUSTAINABLE DEVELOPMENT GOALS

## Good compost,

not only reduces waste issues, but also contributes substantially to the economic and social sectors of a nation.

**Sustainable Development Goal 12:**  
**Responsible Consumption and Production**  
 to substantially reduce waste generation through prevention, reduction, recycling, and reuse by 2030,

composting  
 is seen as a solution to properly manage waste to promote good health and well-being through sustainable practices.



# Awareness is highest when legislation is enforced

The SWM rules, 2016 emphasises source segregation of waste, a basic need for channelizing the waste to wealth by recovery, reuse and recycle. In line with the above, the event organizers, Resident Welfare and Market Associations, Gated communities, institution and SEZ have been assigned responsibility. This will improve the waste segregation and utilization, less waste or only inert to landfill.

# Benefits & drawbacks of composting

## Benefits

Reduce & reuse organic waste

Conserve space, extend life of landfill

Feeds soil, organic manure

Sale-able & profitable

Prevents soil erosion

Increases groundwater

## Drawbacks

Requires time & money

Bulky product, high transportation cost



# What is it?

About

Roles

Stages

## Food wastes

(carbohydrates, proteins, lipids)

60–80%	moisture
3–5%	ash
40–60%	carbohydrate
18–30%	volatiles
10–30%	protein
15–40%	fat
45–65%	carbon



## ORGANIC WASTE COMPOSTING

TALLBOY® organic food waste composting is a type of natural food waste decomposition process under controlled aerobic conditions whereby food wastes are broken down into their simplest components by microorganisms.



## Understanding the pH, C:N Ratio & microbiome

pH levels depend on the nature of input which is kitchen and garden waste. The levels of each component may vary from community to community. If the Carbon:Nitrogen ratios are maintained properly TALLBOY® composters can achieve neutral or slightly alkaline pH values in the finished compost.

add both  
food waste  
& dry leaves

pH  
determines  
acidity or  
alkalinity

Bulking agents such as wood chips, wheat straw, sawdust, chopped hay, wood shavings and rice bran contain a high carbon and is capable of absorbing excess moisture in the food waste and at the same time adding structure to the mix. Carbon is the energy source to microbes. Nitrogen provides protein and facilitates reproduction.

Traditionally,  
20 Carbon:  
1 Nitrogen  
C:N  
different in  
TALLBOY®

bacteria, fungi  
and protozoa  
**microbiome**  
Degradation of  
hemicellulose,  
cellulose and  
lignin

Anthrobacter, Bacillus, Enterobacter, Escherichia, Micrococcus, Morganella, Nitrobacter, Nitrosomonas, Paucimonas, Proteus, Pseudomonas, Staphylococcus, Streptomyces as well as the fungal genera Alternaria, Aspergillus, Cephalophora, Cladosporium, Humicola, Macrosporium, Monillella, Nigrospora, Penicillium, Phoma, Preussia, Rhizopus, Sorotaria, Staphylotrichum, Sistotrema, Thielavia, Thysanophora, Trichoderma, Trichurus, Verticillium and Zygorhynchus.

# Stages

## Mesophilic phase

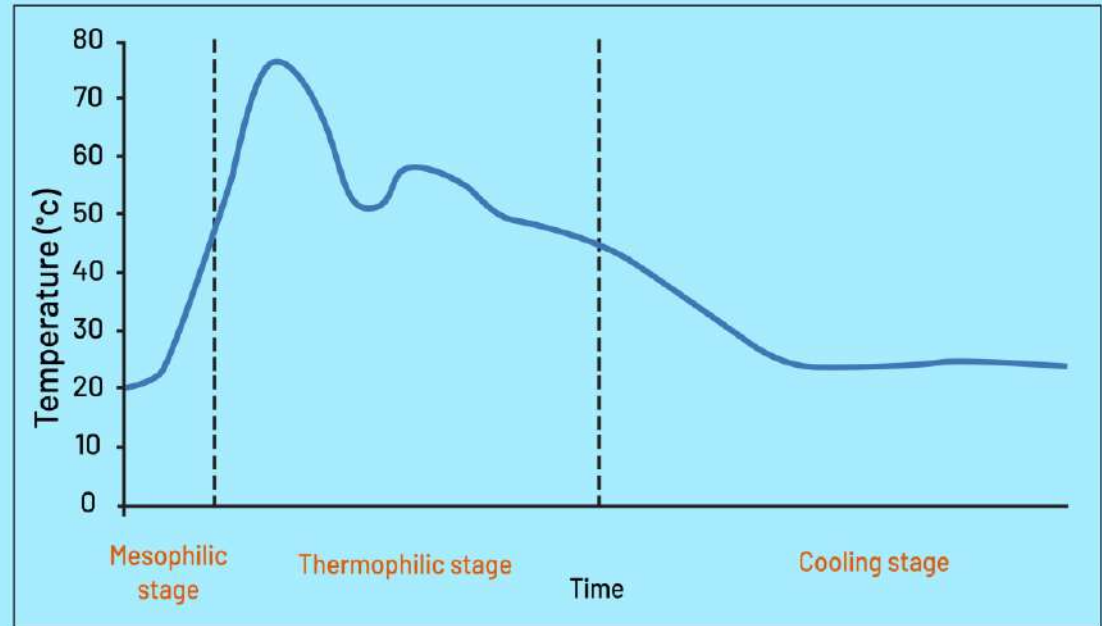
Actinomycetes and fungi: 15 °C to 45 °C

## Thermophilic phase

Bacillus spp. and Actinobacteria: 40 °C and 80 °C

## Cooling or maturation phase

Amycolicococcus, Bacillus & Mycobacterium: below 25 °C



Temperature changes during composting (FAO n.d.).



# TALLBOY® Composting

## How does it work?

Digester

Grinder

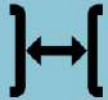
OWC

Compare

# TALLBOY® BioBins



Natural digestion



Space Saving



No heating



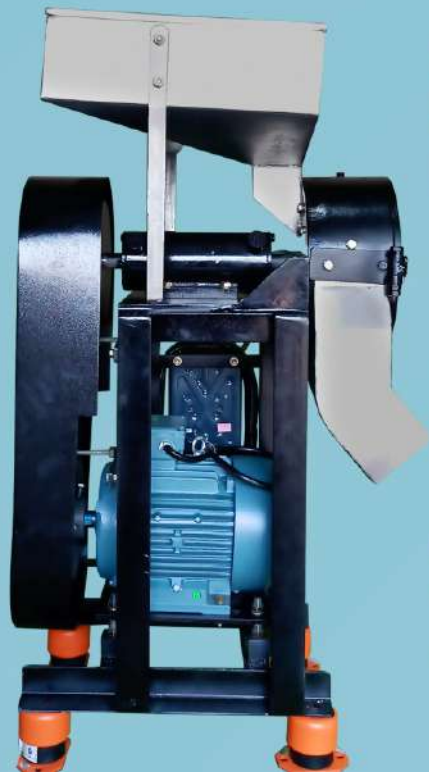
No electricity

bacteria  
fungus  
protozoa  
worms

 **TALLBOY®**  
original & patented design



# Pulverizer



50 Kg/hr  
200 Kg/hr  
500 Kg/hr

verCHEW® 50  
verCHEW® 200  
verCHEW® 500



# TALLBOY® Organic Waste Composter



Simple operation



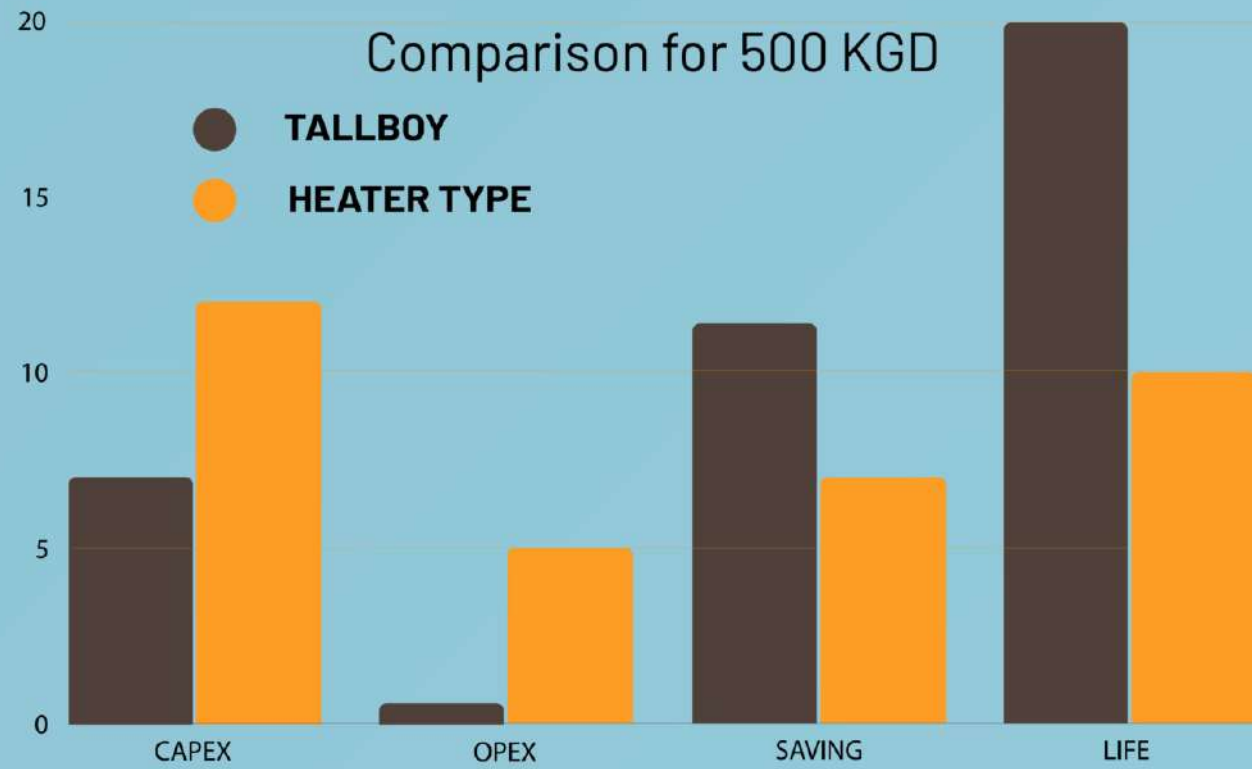
Highly reliable



Very low maintenance



Fully digested, rich brown, Highly nutritious, earthy smell compost



A graphic with a large blue circle on the left containing the text 'ZERO Garbage Plan'. To the right of the circle are three smaller light blue circles stacked vertically, containing the text 'Qualifiers', 'Method', and 'FAQ's'. The background is a textured, geometric pattern of overlapping planes in shades of grey and brown.

# **ZERO Garbage Plan**

**Qualifiers**

**Method**

**FAQ's**

# Qualifier

If your community is following this. We can extend our services to your community.



Organic Waste



Recyclable Waste



Reject/Sanitary Waste

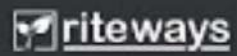




**Site video**

**Good composting,**  
is the key to success in any "Zero Garbage"  
Solid waste management program  
implementation.





successfully running  
**SOLID WASTE  
MANAGEMENT PROGRAMME**  
@ Sobha Petunia Apartment

Tallboy Organic Waste Converter supplied by RITEWAYS



### **What is meant by zero garbage?**

When food and garden waste is recycled to compost, all the clean dry waste is picked by by the scrap dealers and the rejects are incinerated. Nothing goes to landfill.

### **What is need of zero garbage at domestic level?**

Each one of us segregates wet waste at home by default, have you ever emptied your food plate in bedroom bin? So the best place to start is at each and every individual home.

### **Is zero waste society possible?**

Yes, and it can be done very simply. Riteways has been in this line for more than a decade, we can not only show you how, we also provide this as a service.

### **What is zero garbage program?**

Our zero garbage program is called "SANITR" and can be implemented at any community complying with 2Bin1Bag system. In situ composting and dry waste to PCB certified dry waste recyclers.

### **Why zero garbage system is beneficial?**

Without recycling it is a headache of removal, which is both criminal & costly, in today's time. When recycling it brings happiness and creates a positive impact on the community.

### **Why is zero waste important?**

If we continue to produce and consume goods & services without recycling, we will turn everything in to a desert. What future can we promise the generations to come in the future?

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# **ZERO Garbage Plan**

**Qualifiers**

**Method**

**FAQ's**

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