



**MORE THAN TWO-THIRDS  
OF THE WORLD'S WASTE  
GOES TO A LANDFILL.**

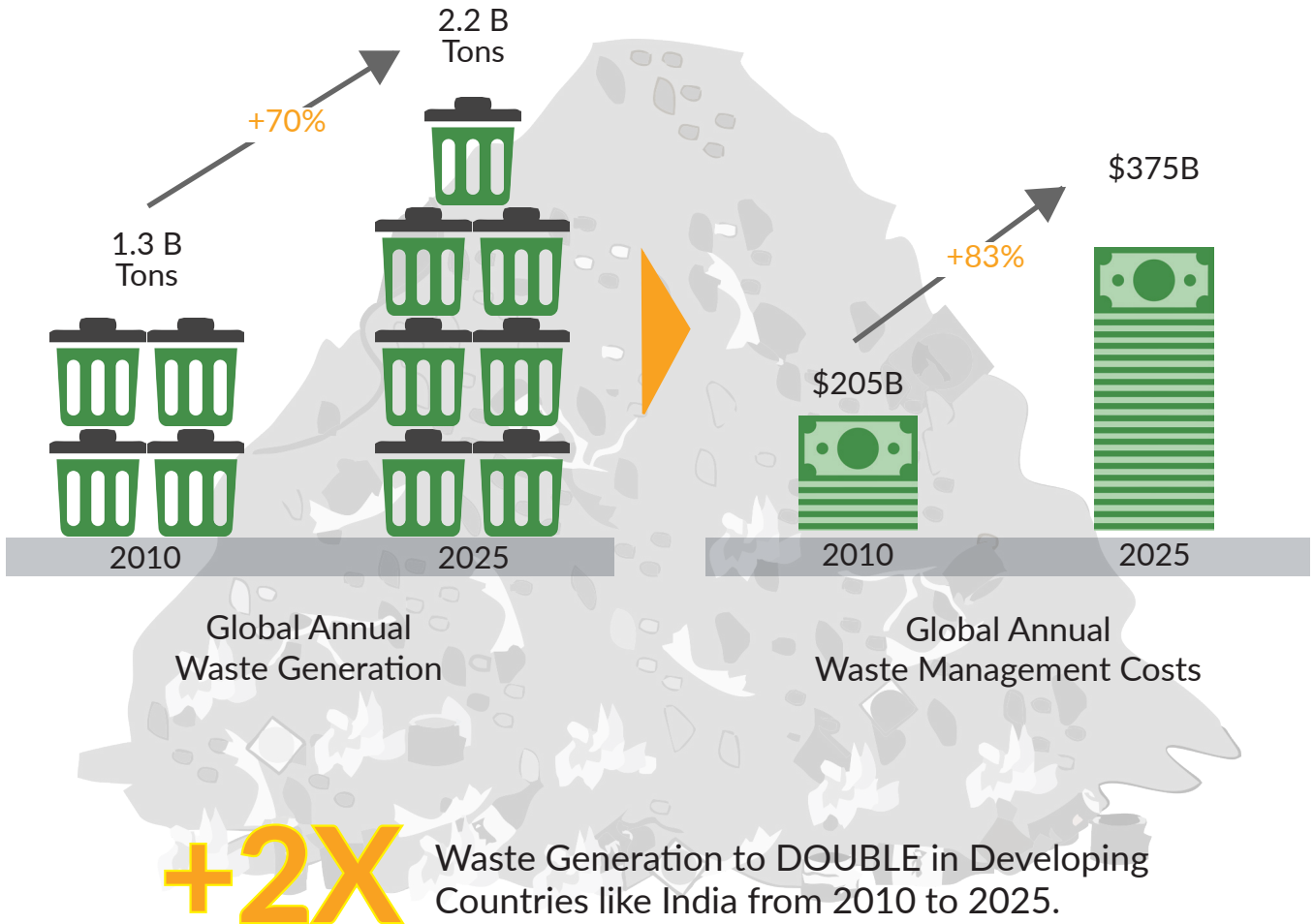
**HOW WILL WE  
CHANGE THAT?**



“The time is always ripe to do  
what is right.”

- Martin Luther King, Jr.

# Municipal Solid Waste, a Fast-Growing Global Problem



Source: WHAT A WASTE, A Global Review of Solid Waste Management Report by Daniel Hoornweg & Perinaz Bhada-Tata, 2012, The World Bank



# Untreated MSW Causes Numerous Problems



## WATER AND SOIL CONTAMINATION

Leachate goes to the water table polluting the water and leading to a variety of diseases.



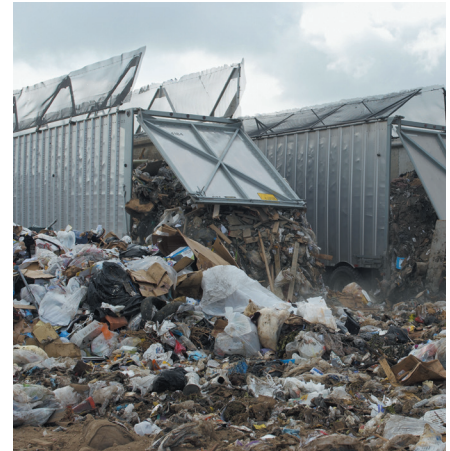
## HEALTH HAZARDS

Landfills emit toxic and green house gases leading to various respiratory diseases and global warming.



## ENVIRONMENTAL DEGRADATION

Centralised landfills require excessive transportation causing environmental and social degradation.



# Existing Technologies Are Not Meeting The Needs



## INCINERATION

- Applicable only at larger ratings – 300 Tons / day and above.
- Not applicable for smaller towns.
- For larger towns, waste needs to be brought to 1 location – expensive and dirty.
- Emissions usually an issue.



## BIOGAS/ COMPOSTING

- Need much more pre processing and segregation.
- Handles only wet waste.
- Slurry has fertilizer value but not always easy to sell/ dispose.
- Substantial fractions of MSW still need landfilling.

**Existing Technologies Do Not Provide a Distributed Solution.  
Emissions and Volume Reduction Remain Issues.**

# Ankur's Solution is Ideal - It Works Everywhere and Handles

## DISTRIBUTED SOLUTION



### IDEAL SOLUTION

Process distributed waste in a distributed manner. Solution should work in villages, towns and cities.

### ANKUR SOLUTION

Relevant for villages, towns and cities of all sizes. **Single Systems to handle 5 to 100 Tons / Day.**

## LOWEST EMISSIONS



### IDEAL SOLUTION

The Emissions should be below all limits defined by the most stringent of bodies.

### ANKUR SOLUTION

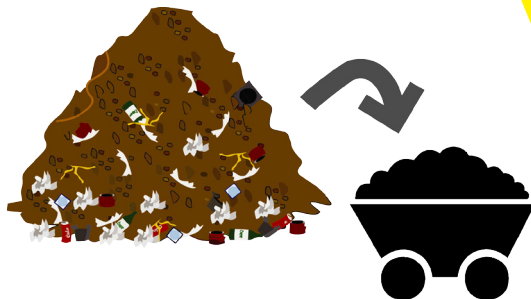
No harmful solid emissions.  
No liquid emissions – **No Leachate.**  
Gaseous emissions well within limits.

IDEAL SOLUTION  
Should treat the waste Online.



# All MSW Related Problems

## VOLUME REDUCTION



### IDEAL SOLUTION

There should be substantial Volume Reduction in the Waste Stream post processing.

### ANKUR SOLUTION

Complete conversion of MSW to energy or usable products. **No Landfilling.**

LINE



### ANKUR SOLUTION

MSW is handled online with minimal pre-processing.

## FINANCIALLY VIABLE



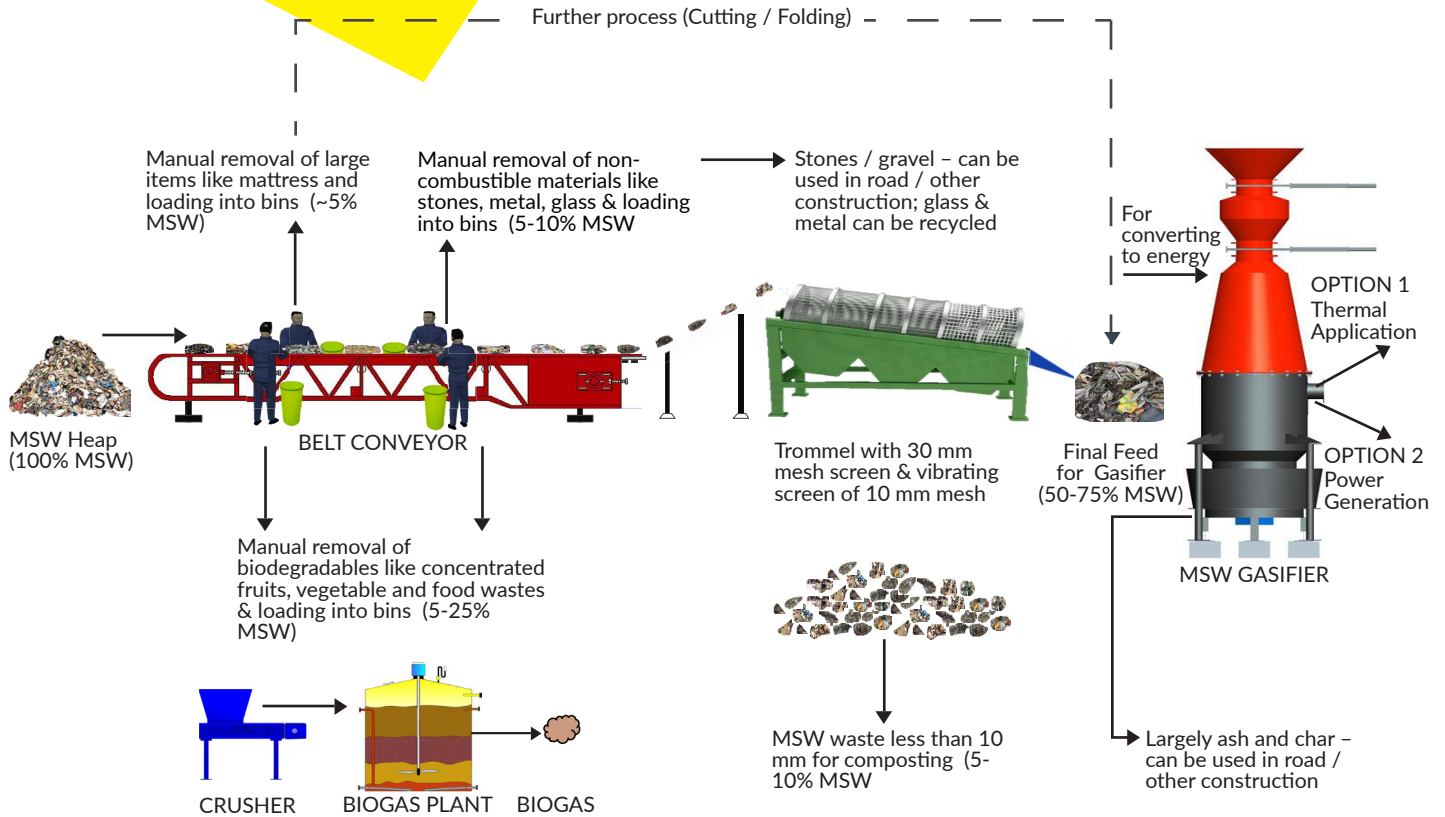
### IDEAL SOLUTION

The projects should be financially viable.

### ANKUR SOLUTION

Ankur's Plant Capex and Opex ensure fastest recovery of capital.

# Ankur's Solution Converts MSW into Usable Energy



**Minimal Pre-Processing.**  
**MSW is Fully Processed and Converted to Useful Streams.**  
**Landfilling is Totally Eliminated.**



# Ankur's Versatile Solution Handles Most MSW Fractions

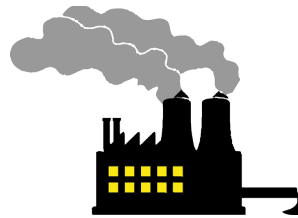


# Ankur's Solution Meets All Emission Guidelines



## Solid Emissions

Non toxic ash/char generated which can be used for road building, soil enhancement, etc.



## Air Emissions (at 6% O<sub>2</sub>)\*

|                 |                        |
|-----------------|------------------------|
| PM              | 30 mg/Nm <sup>3</sup>  |
| CO              | 100 ppm                |
| NO <sub>x</sub> | 100 mg/Nm <sup>3</sup> |
| SO <sub>x</sub> | 100 mg/Nm <sup>3</sup> |



## Liquid Emissions

System generates no liquid emissions.

\*Indicative Only



**For India, Ankur's Technology Meets All Guidelines of NGT, CPCB and Various State Pollution Control Boards.**

# About Ankur Scientific



Founded in 1986 by Dr. B. C. Jain, a gold medalist from BITS, Pilani, Double M.S., Ph.D, & M.B.A. from M.I.T. (Cambridge), an internationally acclaimed technocrat.



**Indigenously Developed and Patented Technologies** that meet all emission and safety norms.



**1000+** systems installed in **35+ countries** worldwide.



Working with various Governments globally, NGOs, agencies of the UN, EU, World Bank, Internationally reputed Universities, the Gates Foundation, various industrial and investor groups and private industry.



Receptient of numerous National and International Awards.



**ISO 9001, ISO 14001 and OHSAS 18001** certified.  
All equipment is **CE** certified.

Is MSW a problem for you?  
**ANKUR** has the right solution.

**CONNECT WITH US**



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