



PRO WASTE

A call to Action

IISC February 24th 2016



PRO WASTE



Our Vision - A Future Without Landfills

Mission

Pro waste was founded with a mission to change the mind set of the people to give away their waste and not throw the waste. Waste should be converted into resource and energy by effective and efficient use of technology which would generate revenue.

This will ensure that no waste goes to the landfills which are a threat to the environment.

We create “Zero Waste Campuses”



Any material that is thrown away because of no value is called Waste. Waste is exploding in India.



An inevitable consequence of development and industrial progress is generation of Waste



Management of solid waste is one of the most neglected areas of development in India. The way we do it, will impact the globe for a very long time. Solid waste is the most visible forms of environmental bad. It is seriously affecting the quality of life.



In spite of adequate legal framework to address solid waste management issues, what is lacking is its implementation.



It is simply not enough to “sweep waste out of sight, to make some neighborhoods seem deceptively clean, but it needs a systematic approach involving reduction, collection, safe treatment, recycling and disposal , something which has been beyond the scope of our municipalities.

Creating Zero Waste Zones

Phase 1: Review - Detailed study of the present waste disposal system.

Phase 2: Preparation / Infrastructure - Mapping and quantification of each category of waste and determining the infrastructure and disposal methods.

Phase 3: Awareness - Training and awareness for the stakeholders and ensuring participation from the community.

Phase 4: Initiation/Implementation - Initiating the process for effective collection, , storage and disposal of each category of waste.

Phase 5: Auditing – Audit visits to the site to check for any deficiencies – problem solving.

Phase 1- Review

- Survey whole of the whole campus
- Collection of details of the current waste disposal system



Phase 2 -Preparation and Infrastructure

- Mapping and Quantification of each category of waste
- Infrastructure – Dustbins, storage shed, collection vehicle
- Determining disposal methods/solution providers for each category of waste.



Phase 3 -Awareness

- Training and education sessions.
- Effective communication to bring about behavioral change
- Posters and banners
- Ensure participation and support from the generators of waste and all stakeholders.

Phase 4 – Initiation/Implementation

- Synchronization of the full procedure- from source of generation of each category of waste, handling, storage and its disposal.
- Implementation of the Standard Operating System for each facility on the campus

Phase 5 – Re enforcement /Audits

- Frequent waste Audits
- Periodic Enforcement exercise
- Addressing the problems if any



Jawaharlal Nehru Center for Advance Scientific Research (JNCASR)

since June 2013

Below is the synopsis of facilities at the campus along with the type of waste generated :

FACILITY	TYPE OF WASTE
Canteen	Organic / Paper / Plastic
Office Area	Organic / Paper / Plastic / E Waste
Hostel	Organic / Plastic Paper / Bio Medical
Labs	Paper / Plastic / Hazardous
Green / Garden Area	Green Waste /Paper / Plastic
Medical Facility	Bio Medical Waste
Residential Colony	Organic / Paper / Plastic and
	Bio Medical Waste / E Waste

QUANTUM OF WASTE GENERATED IN THE CAMPUS

RECYCLABLE WASTE

Period	Quantity (in Kgs)
29.07.2013 – 23.12.2013	4233
01.01.2014 – 30.12.2014	9442
01.01.2015 – 30.12.2015	9300
Total Weight	22975

BIO MEDICAL WASTE

Type	Kgs Per Day
Animal Beddings	30-40
Animal Carcass and Lab Waste	8-10
Medical waste from Dhanvantari and Sanitary Waste from hostel area	8



Segregation of waste - Separate dustbins for different categories of waste kept at various locations





Biomedical / Sanitary Waste





Recyclable Waste – Paper/Plastic Cartons/Metals



Central Power Research Institute

- Public Sector enterprise
- 110 + 12 Acre of campus and residential colony
- 280 Apartments
- Guest House
- 2 Canteens
- Medical centre
- Mindset of the people was the biggest challenge
- Phase 1, for setting up the infrastructure and deciding vendors took almost 8 months
- Rigid work conditions

Vendors

Medical Waste/ Sanitary Waste – Anu Autoclave

Recyclables – ITC

Dust Bins – RC Ventures

Luggage Trolley – Sanjay Cycles

To Be Decided –

Bio Gas Plant

Sewage Treatment Plant

Waste Oil

Chemical Waste

E waste

Quantification Of Waste

Type Of Waste	Weight Per Day (in Kgs)
Dry Waste / Recyclables	30
Food Waste	150
Medical Waste	15









Penta

USED CUPS
ONLY





Holistic Approach in IIT Gandhinagar

- Banning and restricting the use of Disposables
- Policies to discontinue bottled water
- Using recycled paper
- Declaring “No Plastic Zone”
- Steps to reduce wastage of Food

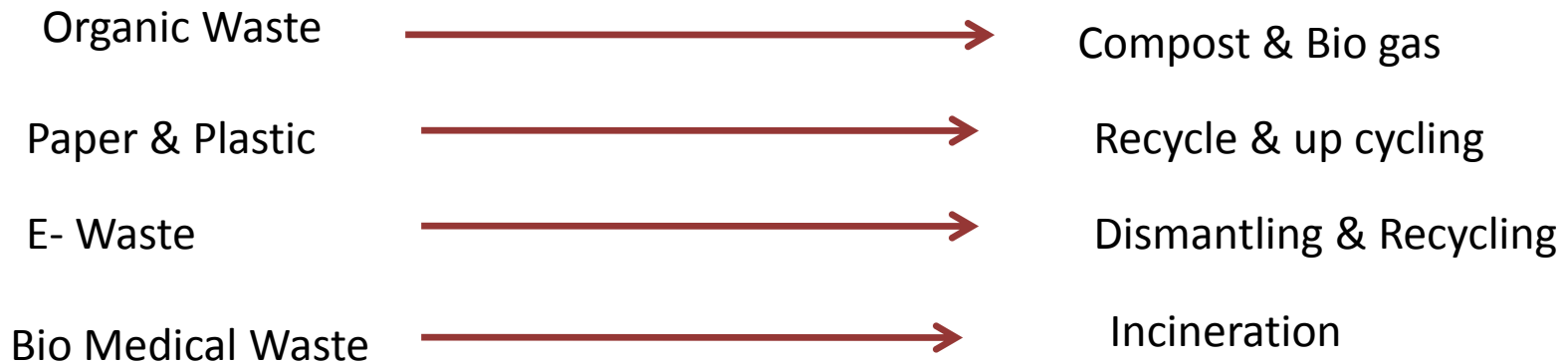


The Concept

Before



After



The Large size Projects

- Jawaharlal Nehru Center for Advanced Scientific Research, Bangalore
- Indian Institute of Technology – Gandhinagar
- MEG Ulsoor, Bangalore
- Mahatma Gandhi Institute of Rural energy and development, Bangalore
- CPRI Bangalore – Residential colony and campus
- KL University - Vijayawada



Govt. of Karnataka



Mahatma Gandhi Institute of Rural Energy & Development

Rural Development & Panchayath Raj Department

e-Waste Collection Centre

In collaboration with:

Bruhut Bengaluru Mahanagara Palike

Pro Waste concepts Pvt. Ltd.

Vans Chemistry

Please handover E-Waste

to Security and enter details in Register 24 X 7

For any enquiry please contact : Between 10:00 AM to 05:30 PM 080-23626359 / 23626493





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WINNER

A TiE Bangalore Initiative

Thank you