



DECENTRALIZED TAILOR MADE SOLUTIONS FOR ORGANIC WASTE PROCESSING



®

ARROWCON

"Greening the Globe, One Bin at a Time."





Arrowcon Energy Private Limited, a waste management company that provides comprehensive solutions for managing waste

sustainably.
Let us work together to create a cleaner and healthier



PRODUCTS & SERVICES

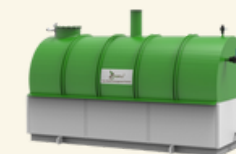


Zero waste Management



Organic waste composter

Biogas plants



Bio-CNG Plant



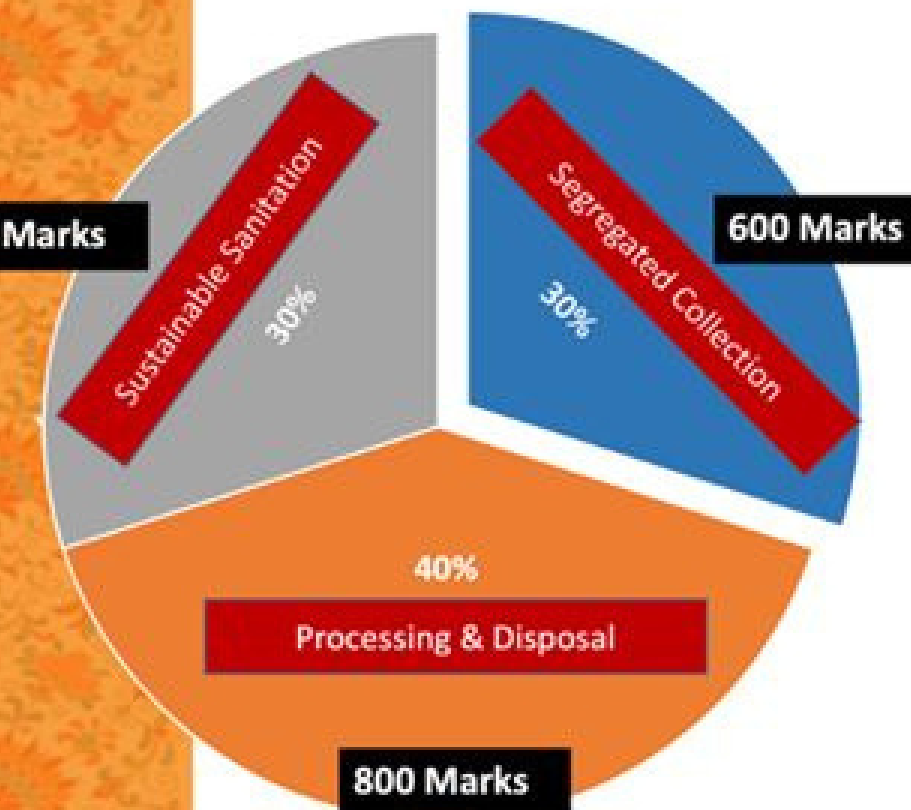
Our mission is to build a sustainable future by reducing the amount of waste that ends up in landfills and pollutes our environment.

SWACHH SURVEKSHAN 2023

1. SEGREGATED COLLECTION

Total Number of Indicators: 7

600 Marks / 2,000 Marks



2.2

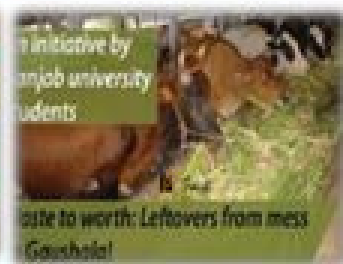
Percentage of wet waste being processed (out of total wet waste collected)

Marks 100

This indicator assesses the extent of decentralized and centralized management/processing of wet waste collected. The amount of wet waste being sent to the landfill should be minimized.



Scheme of Marking	Marks
Processed between 91- 100%	100
Between 81- 90%	80
Between 71 - 80%	60
Between 61 -70%	40
Between 51 - 60%	20
Between 41 – 50%	10
Between 30 – 40-%	5



2.1

Percentage of Wet waste processing capacity of functional plants (out of the total wet waste collected)

Marks 100

The indicator would assess whether a city has adequate facility/infrastructure to process the wet waste collected. City will provide the actual waste collection figure where door to door collection is in place.



Scheme of Marking	Marks
Between 91- 100%	100
Between 81- 90%	80
Between 71 - 80%	60
Between 61 -70%	40
Between 51 - 60%	20
Between 40 – 50%	10



HOW CAN A CITY'S RANKING GO UP IN THE SWACHH SURVEKSHAN?

Sr. No.	Swachata survekshan points	Points	Biofics Swachhata survekshan efforts
1	Wet Waste processing & Capacity	600	Daily Processing Logbook Sale Register Vendor details Electricity Bill
2	User charges	300	Viable and sustainable user charges from BWGs
3	Processing by Bulk Waste Generators (BWGs)	200	100% recycling at all BWGs
4	IEC & Capacity Building	150	3R initiatives Waste based artefacts Development & enforcement of Zero Waste events
5	On-Site Wet Waste processing	300	To achieve 100% waste recycling on-site at all BWGs
6	Sale of Waste by-products	250	Achieving 75% sale of Wet waste by-product
7	Digital Monitoring of Wet Waste Processing	450	Digital Monitoring of Wet waste collection processing and by-product management

OUR RESPONSIBILITY AS WASTE GENERATOR

1) Segregation of Waste into Blue Green and Red Dustbin

Green Dustbin : Food Waste, Geela Kachra

Blue Dustbin : Plastic, Paper Sukha Kachra

Red Dustbin : Hazardous waste - Mask, Gloves, napkin

2) On-Site Processing of Organic Waste

Installing an Organic Waste Composting Unit at your facility to process all your kitchen and food waste.

BENEFITS OF BETTER SURVEKSHAN RANKING

1) As a BWG, better Swachhata Ranking of the city will help you with more tourism and word of mouth publicity, this will increase the inflow of the tourists in the city.

2) The Facilities/RWAs/Hotels performing better with cleanliness will be awarded with swachhata certificate and will be promoted as a swachh facility

SWACHH SURVEKSHAN

2, 3

UNDER SWACHH SURVEKSHAN WASTE
SHOULD BE MANAGED UNDER TWO LEVELS

CITY WASTE

Handling waste of dumpsite and collected by transport waste collection segregating waste so no recyclable waste should go to landfills

BULK WASTE GENERATORS

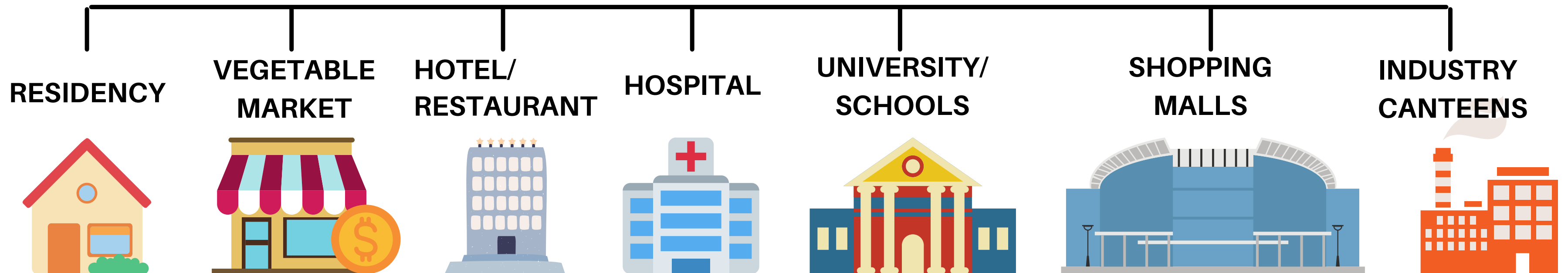
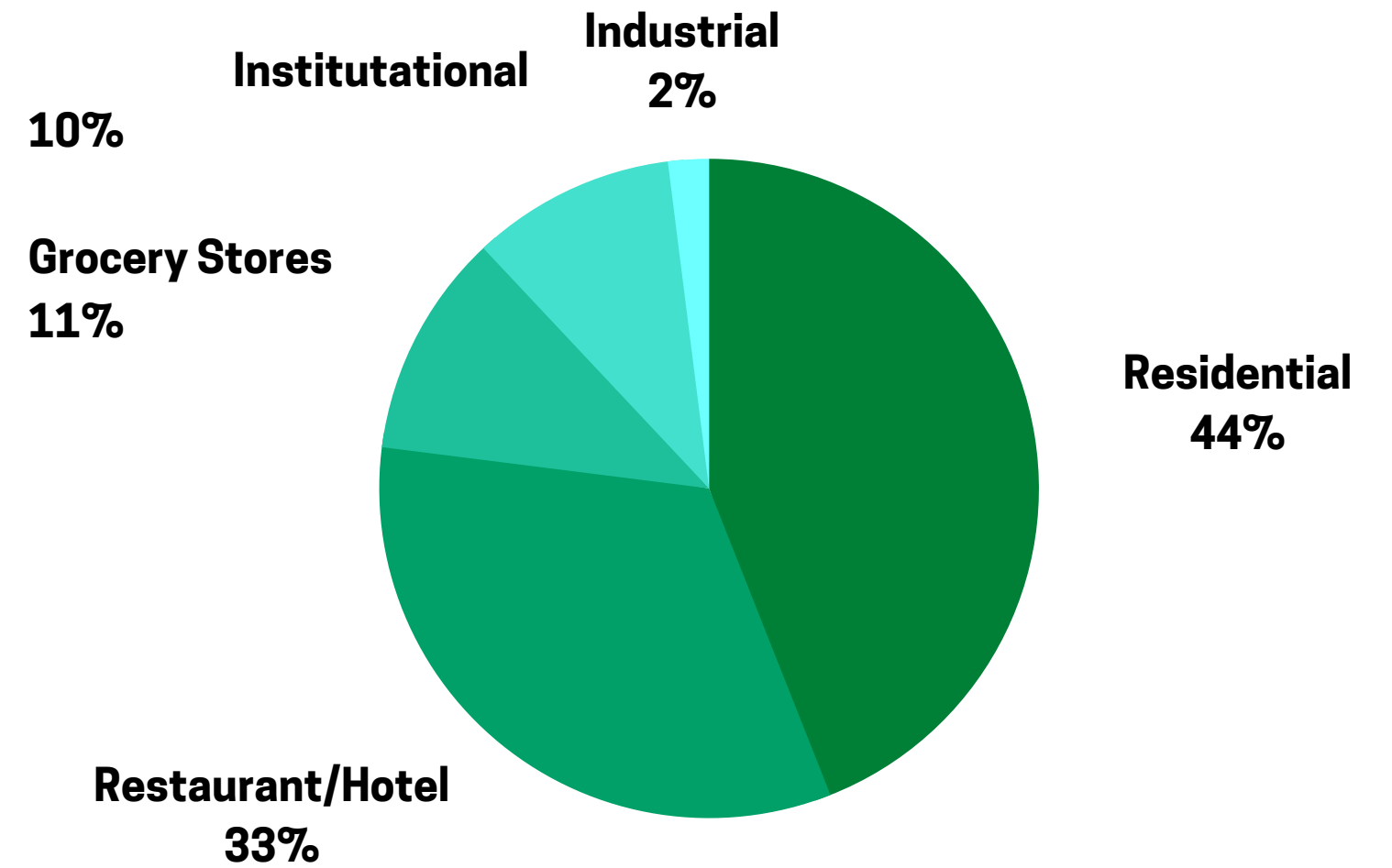
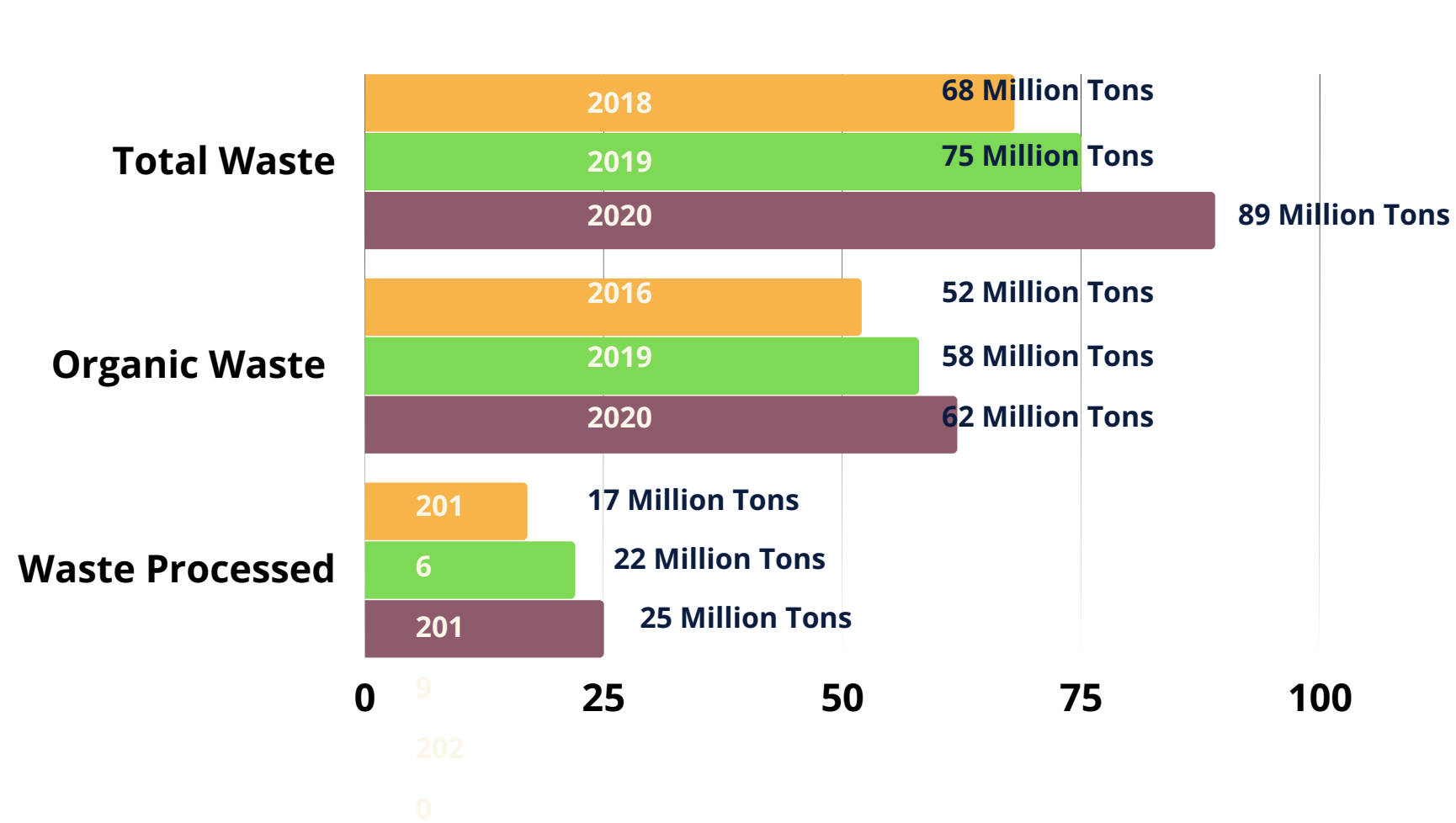
Decentralizing waste segregating at initial level of BWG's

Model – 1 –ZERO Waste Management at Bulk Waste Generator Level

Empanelment of Arrowcon Energy with yours
so Arrowcon Energy can work with BWGs
directly to segregate and process their
recyclables on site

BULK WASTE GENERATORS:

- We will be targeting 80% of Organic Waste Generated in Urban Spaces.



PROBLEM STATEMENT

WASTE SEGREGATION AT SOURCE

WASTE PROCESSING AS A PRACTICE

OWCS AND OTHER UNITS ARE MOSTLY IN IDLE CONDITIONS

INACCURATE WASTE DATA

VALUE GENERATION OF END PRODUCT - COMPOST

**ENCOURAGEMENT OF CITIZENS FOR FOLLOWING SOLID WASTE
MANAGEMENT NORMS**

HOW WASTE IS MANAGED?

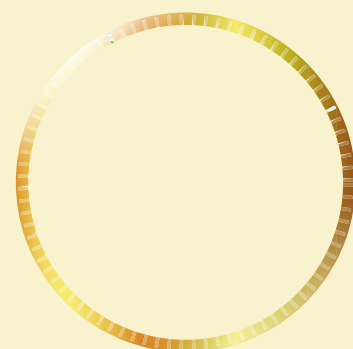


A

Waste Management Services

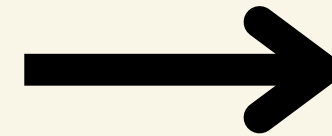
B

Organic waste to energy



Arrowcon Energy

Services for BWGs



Collection

Segregation

Processing

**Savings Per Annum with Arrowcon
Energy:**

Salient Features

1. Implementation of SWM Rules 2016
2. Compliance and log book shared with Municipal Corporation

₹2,19,00,000

**from Collection and processing of
30TPD waste from BWGS**

Arrowcon Energy Pvt. Ltd

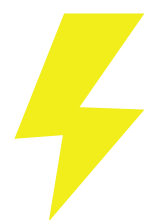
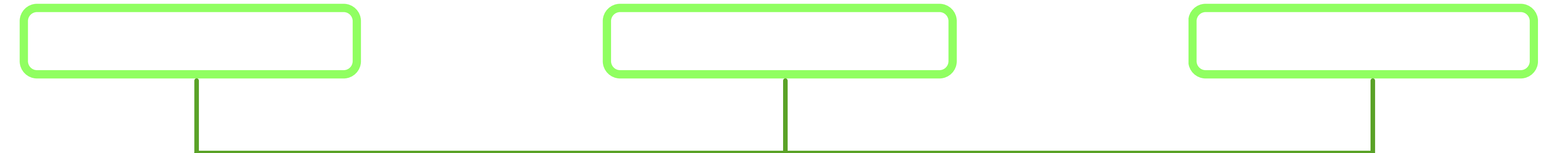
SMALL SCALE BIOGAS PLANT



PRE-FABRICATED BIOGAS PLANT



CIVIL CONSTRUCTED BIOGAS PLANT



ELECTRICITY



**COMPRESSED
NATURAL GAS**



**NATURAL
BIOGAS**



**ORGANIC
FERTILIZER**



**LIQUID
FERTILIZER**

ARROWCON ENERGY WAYS OF WASTE

MANAGEMENT

Size	Model	
Small BWGs	<ul style="list-style-type: none">• Small eateries• Residential societies• Shops	<ul style="list-style-type: none">• Opt-1- Setup an inhouse Smart Biogas plant for gas and electricity, machinery purchase and training• Opt-2- Setup a rental model plant to Wet waste processing and segregation of other waste, pay per kg.• Opt-3- Waste collection and processing at Central BioCNG plant or at small decentralized MRF + Waste to energy plant.
Large BWGS	<ul style="list-style-type: none">• Restaurants and hotels• Residential complexes• Commercial complexes• Shopping malls	



Model - 2 Centralised BioCNG plant for the Municipal Corporation

Arrowcon Energy can setup a Central BioCNG plant Operate the said plant to generate revenue to meet expenditure and pay royalty to Municipal corporation.

CENTRAL BIO-CNG (Royalty Model)



Segregated Organic Waste to be transported to BIO-CBG Plant
Royalty to the Municipality for Organic waste provided at BioCNG
site at Rs. 250 per ton of Organic waste.

Organic Waste collected from BWGs at a minimal fee from BWGs,
resulting in transportation costs savings to Municipal Corporation.

CENTRAL BIO-CNG (Royalty Model)




- Setup of BioCNG plant by Arrowcon Energy under allowances by Municipal corporation.
- Organic Bio-fertiliser to be enriched and sold to farmers generating awareness of Organic farming.
- Entire Bio-CBG Plant setup by Arrowcon Energy and O&M done by Arrowcon Energy for Waste received at the Plant at Zero Cost to the

BioCNg and Biofertiliser produced by Arrowcon Energy 30 TPD Organic Waste Processing



Scope of Work - Arrowcon Energy

1. Operation and Maintenance of Biogas set-up for Municipal Corporation.
 2. 30 Tonnes per day of Waste Processing and converting into CNG with 98% purity of Methane
 3. Providing Royalty to BMC at Rs. 250 per ton of Segregated Organic waste provided
 4. Waste Data Records managed and reports generated
 5. Compliance Management under Swachh Bharat Mission
 6. Conducting awareness sessions for citizens in bulk-waste generating areas to ensure maximum segregation
 7. Secondary segregation unit for any mixed waste
 8. BIOCBG Plant
 9. Organic fertiliser processing set-up
 10. ETP plant of appropriate capacity as per the waste input and output
 11. Data centre to store daily reports of solid waste processing and provide with different reports to the municipal corporation
- 

Scope of Work - Municipal Coporation

1. Providing Arrowcon with 5 acres of land.
2. The land should be within the city limits and easily accessible by road for smooth functioning of the plant.
3. Providing the land for a minimum 15 year lease period.
4. Providing a total of 60 T organic waste per day.
5. Providing a sewage and drainage connection for the plant.
6. Collecting of Inorganic/Inert waste from the plant.



Model – 3 Going Zero Waste

"A ZERO WASTE PLANT SETUP"

Setup and Operate decentralised MRF and Waste to energy Plants in each ward in yours

Decentralised Zero Waste Facility



Setting up 2-5 TPD decentralised MRF and Waste to energy plant all over yours in each ward

Decentralised Zero Waste Facility



- Operation of MRF and Waste to energy plant.
- Collection of waste from BWG (tipping fees charged from BWG) by deploying Arrowcon Energy waste van, no cost to yours
- Waste segregation to generate Organic Waste (60%), Recyclable waste (30%) and Inert waste (10%).
- Processing Organic waste, tying up with recyclers for waste recycling.
- Handing over inert waste to yours at transfer stations.

Decentralised Zero Waste Facility

Benefits to yours

- Savings in waste collection cost from 100% waste collection to just 10% inert waste collection, **90% saving in waste collection cost.**
- Processing at Organic waste facility at **0 cost to yours.**
- Data generation for Swacch survekshan 2023 increasing the rank of Ganshinagar.
- **Additional Waste to energy plant** can be setup to aid electricity needed in this ZERO waste facility.

Rs. 2,160

savings per ton of waste collected

Thanking you!



7227042189, 8401474369

manish@arrowcon-energy.com

sales@arrowcon-energy.com