

CLEANER PEOPLE BRIGHTER CITIES HEALTHIER INDIA



A
CLEANER
CITY.
A HEALTHIER
INDIA

BLACKHOLE[®]

WASTE DISPOSAL SYSTEM

FROM TODAY FOR A BETTER TOMORROW

SAME
CITIES.
CLEANER
TOMORROWS.



PEOPLE



CLEAN ENVIRONMENT



SUSTAINABLE CITIES



BETTER TOMORROWS

CLEAN
CITIES
STRONGER
PEOPLE

TESLAGREEN 

FOR A GREENER TOMORROW

COMPANY PROFILE

CLEANER CITIES. BRIGHTER TOMORROWS.

BlackHOLE® is a breakthrough integrated municipal solid waste management system developed by TeslaGREEN to help cities eliminate landfill dependency, recover resources and create cleaner, healthier, more sustainable urban environments.



INTEGRATED SOLUTION

COLLECTION TO
RESOURCE RECOVERY



REDUCES LANDFILL DEPENDENCY

CLEANER, HEALTHIER
CITIES



RECOVERS VALUABLE RESOURCES

ENERGY, MATERIALS
AND MORE



PROVEN DEPLOYMENTS

ACROSS INDIA AND
INTERNATIONAL MARKETS



BUILT FOR A SUSTAINABLE TOMORROW

CIRCULAR ECONOMY
IN ACTION

*Cleaner
Stronger
Greener
Together*

OUR PURPOSE

To transform waste into value
and build cleaner, more
livable cities.

OUR VISION

A zero-landfill future
for every city.

OUR VALUES

Innovation | Sustainability
Impact | Integrity
Partnership

PEOPLE | PLANET | PROGRESS | TOGETHER.



THE BLACKHOLE PROJECT

WHY IT WORKS

An integrated, end-to-end solution that transforms municipal solid waste from a growing problem into a source of value — cleanly, safely and sustainably.



PROVEN
TECHNOLOGY



COMPLIES WITH
SWM 2016 &
SBM-URBAN



SCALABLE &
MODULAR



ECONOMICALLY
VIALE



REAL-WORLD
DEPLOYMENTS



GLOBAL
APPLICABILITY

FROM WASTE TO A BETTER TOMORROW

1

WASTE RECEIPT & SEGREGATION

Mixed municipal waste is received and pre-processed to remove recyclables and inerts.

2

BLACKHOLE PROCESSING

Proprietary thermal treatment technology converts residual waste into useful outputs with ultra-low emissions.

3

RESOURCE RECOVERY

Energy, materials and other valuable by-products are recovered for circular use.

4

CLEANER CITIES

Significantly reduced landfill dependency, lower emissions and healthier, more livable urban environments.

MUNICIPAL SOLID WASTE

Today's Challenge

Overflowing landfills
Mixed waste streams
Pollution & methane emissions
Public health risks
Rising urban waste volumes



A CLEANER
BRIGHTER
TOMORROW

REAL IMPACT ACROSS THE VALUE CHAIN



**80-95%
REDUCTION
IN LANDFILL WASTE**
Dramatically lowers
city landfill burden.



**ULTRA-LOW
EMISSIONS**
Complies with national
and international
environmental standards.



**CLEAN ENERGY
GENERATION**
Converts waste into
usable energy.



**RESOURCE
RECOVERY**
Recovers metals, inerts
and other valuable
materials.



**COST EFFICIENT
OPERATION**
Lower long-term
municipal waste
management costs.



**HEALTHIER
COMMUNITIES**
Cleaner surroundings,
reduced disease risk,
better quality of life.



**SCALABLE
GLOBALLY**
Proven across Indian cities
and international markets
in diverse conditions.

*Cleaner
Stronger
Greener
Together*



FROM ONE SOLUTION TO A **CLEANER TOMORROW**

A PHASED PATHWAY FOR A CIRCULAR, CLEANER, STRONGER INDIA



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

PEOPLE
PLANET
PROGRESS
TOGETHER

WASTE
TO VALUE
FOR A CLEANER
TOMORROW

CLEANER CITIES
STRONGER COMMUNITIES
A BRIGHTER INDIA.



MULTIPLE CITIES
A CLEANER INDIA



STAGE.01 **START** MUNICIPAL WASTE INTAKE



- Receive municipal solid waste
- Establish collection & transport
- Bring waste into a controlled facility

TODAY
LAYING THE FOUNDATION

STAGE.02 **BUILD** INTEGRATED PROCESSING



- Process incoming waste
- Introduce separation technologies
- Reduce landfill dependence

NEXT
BUILDING CAPACITY

STAGE.03 **RECOVER** MATERIAL & RESOURCE RECOVERY



- Recover metals
- Recover plastics
- Recover paper & cardboard
- Recover organic (wet waste)
- Route materials to respective streams

MORE VALUE
FROM EVERY TONNE

STAGE.04 **TRANSFORM** WASTE TO ENERGY + USEFUL OUTPUTS



- Plasma / thermal processing
- Generate clean, renewable electricity
- Organic fraction to biogas / compost
- Residual output cooling & stabilisation for reuse

TURNING WASTE
INTO OPPORTUNITY

STAGE.05 **INTEGRATE** THE MUNICIPAL RESOURCE SYSTEM



- Integrate waste, energy, materials and organic resources
- Supply clean energy to the grid
- Support infrastructure and industries
- Enable circular economy at city level

A SMARTER,
CLEANER MUNICIPAL ECOSYSTEM

STAGE.06 **SCALE** CITY TO INDIA



- One facility → One city
- Multiple cities → State & National network
- Standardised technology
- Replicable model
- City-specific implementation

GREATER IMPACT
A CLEANER INDIA



INDIAN ENVIRONMENTAL
ENGINEERING



HEALTHIER
COMMUNITIES



RENEWABLE
ENERGY



RESOURCE
RECOVERY



ECONOMIC
OPPORTUNITY

**START WITH WASTE.
BUILD A RESOURCE SYSTEM. SCALE ACROSS CITIES.**

CLEANER TODAY. BRIGHTER TOMORROWS.

MUNICIPAL SOLID WASTE

IT COMES FROM
OUR HOMES,
SHOPS, MARKETS
AND EVERYDAY LIFE.

A
CLEAN HOME
A HEALTHY
CITY

CLEANER
PEOPLE
BRIGHTER
CITIES

FRESH
FOOD
BETTER
LIVES

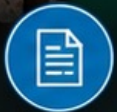
CLEAN
OUR CITY
GREEN
TOMORROW

OUR WASTE
OUR RESPONSIBILITY
A CLEANER TOMORROW



FOOD WASTE

From homes & restaurants



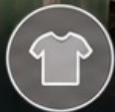
PAPER & CARDBOARD

From households & shops



PLASTICS

From everyday use



TEXTILES

From homes & markets



BIOMEDICAL WASTE

From clinics & households



METALS

From consumer products



GARDEN & YARD WASTE

From parks & homes



OTHER MIXED WASTE

From daily life



INDIAN ENVIRONMENTAL
ENGINEERING

| HEALTHIER PEOPLE | BRIGHTER TOMORROWS

BLACKHOLE®

TURNING WASTE
INTO A BETTER TOMORROW

CLEANER
PEOPLE
BRIGHTER
CITIES

COLLECT TODAY

A CLEAN CITY
BEGINS AT
YOUR DOORSTEP.

SAME
EFFORT.
CLEANER
TOMORROWS.



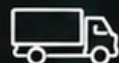
1. DOORSTEP COLLECTION

Homes, shops
and communities



2. MUNICIPAL COLLECTION

Segregated and
mixed waste



3. TRANSPORT

To integrated
processing facility



4. TOWARDS A CLEANER CITY

Responsible. Efficient.
Sustainable.

BLACKHOLE®

WASTE DISPOSAL SYSTEM

CLEAN CITIES. BRIGHTER TOMORROWS.



INDIAN ENVIRONMENTAL
ENGINEERING

FROM
OUR STREETS
TO A CLEANER
TOMORROW

TRANSPORT FOR A CLEANER CITY

COLLECTED TODAY.
PROCESSED TOMORROW.
A HEALTHIER INDIA.

SAME
WASTE.
A BRIGHTER
TOMORROW.

City	12 km	
Perungudi	18 km	→
Processing Facility	28 km	



1. GENERATE
Homes, shops,
markets, institutions



2. COLLECT
Doorstep &
community collection



3. TRANSPORT
To integrated
processing facility



4. PROCESS
Towards a cleaner,
greener city

BLACKHOLE®

WASTE DISPOSAL SYSTEM

CLEANER CITIES. BRIGHTER TOMORROW.



INDIAN ENVIRONMENTAL
ENGINEERING

INTEGRATED MUNICIPAL WASTE MANAGEMENT SYSTEM

A CLEANER CITY
A HEALTHIER TOMORROW

PEOPLE
PLANET
PROGRESS
TOGETHER



1. COLLECTION

From homes, shops
and communities



2. TRANSPORT

To integrated
processing facility



3. INTEGRATED PROCESSING

Advanced clean technology



4. WASTE TO VALUE

Energy, compost,
recovered materials



5. CLEANER CITIES

Healthier communities
Stronger India



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROW



INDIAN ENVIRONMENTAL
ENGINEERING

CLEAN
CITIES
START WITH
RESPONSIBLE
INTAKE

WASTE INTAKE

UNSEGREGATED TODAY.
A CLEANER TOMORROW.



PEOPLE
PLANET
PROGRESS
TOGETHER

SORT
RECOVER
PROCESS
TRANSFORM



FROM MIXED WASTE
TO A CLEANER CITY



1. ARRIVAL

Municipal collection
trucks arrive



2. UNLOADING

Mixed municipal
solid waste



3. INTAKE

Direct intake without
pre-sorting



4. TO PROCESSING

Moves to in-plant
separation & recovery



BLACKHOLE
INTEGRATED MUNICIPAL

WASTE IN. A CLEANER TOMORROW



INDIAN ENVIRONMENTAL
ENGINEERING

ONE CITY. MANY WASTE STREAMS.

ALL TYPES OF MUNICIPAL SOLID WASTE
ACCEPTED AT ONE INTEGRATED FACILITY.



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

**SORT
RECOVER
PROCESS
TRANSFORM**

DIFFERENT
WASTES.
SAME
SOLUTION.

CLEANER
CITIES
BRIGHTER
TOMORROWS.



**FOR A
CLEANER
TOMORROW**

IN THE FUTURE,
WASTE STREAMS
WILL BE FURTHER
SEGREGATED USING
ADVANCED SORTING
TECHNOLOGY.



FOOD & ORGANIC WASTE

Wet waste
(Food, kitchen waste,
garden waste)



PLASTICS

From households,
shops & markets



PAPER & CARDBOARD

Packaging &
paper products



TEXTILES

Clothes &
fabric waste



METALS

Ferrous &
non-ferrous metals



INERT / OTHER WASTE

Construction debris,
soil & inert materials



1. RECEIVE

Multiple waste streams
at one facility



2. SEPARATE

Recover recyclable
materials



3. PROCESS

Remaining waste to BLACKHOLE



4. RECOVER VALUE

Energy, compost, materials



BLACKHOLE®
INTEGRATED MUNICIPAL

FROM WASTE TO VALUE
FOR A CLEANER TOMORROW



INDIAN ENVIRONMENTAL
ENGINEERING

SEPARATION CREATES VALUE

IN-PLANT MATERIAL RECOVERY
AND AUTOMATED SEPARATION
TECHNOLOGY.



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

CLEAN
TECHNOLOGY
BRIGHTER
CITIES

AUTOMATED
SORTING SYSTEM
CLEANER TOMORROW

RECOVER
PROCESS
TRANSFORM

ORGANIC WASTE
TO BIOGAS
AND COMPOST

METALS

PLASTICS

PAPER &
CARDBOARD

ORGANIC
(WET WASTE)

INERT &
OTHERS



1. RECEIVE

Mixed municipal
waste



2. SEPARATE

Automated and
manual sorting



3. RECOVER

Metals, plastics,
paper and organics



4. ROUTE

Recyclables to respective
streams



5. PROCESS

Remaining waste
to BLACKHOLE



BLACKHOLE®
INTEGRATED MUNI

RECOVER TODAY. A CLEANER



INDIAN ENVIRONMENTAL
ENGINEERING

CLEAN
CITIES
START WITH
RESPONSIBLE
INTAKE

WASTE INTAKE

UNSEGREGATED TODAY.
A CLEANER TOMORROW.



PEOPLE
PLANET
PROGRESS
TOGETHER

SORT
RECOVER
PROCESS
TRANSFORM



FROM MIXED WASTE
TO A CLEANER CITY



1. ARRIVAL

Municipal collection
trucks arrive



2. UNLOADING

Mixed municipal
solid waste



3. INTAKE

Direct intake without
pre-sorting



4. TO PROCESSING

Moves to in-plant
separation & recovery



BLACKHOLE
INTEGRATED MUNICIPAL

WASTE IN. A CLEANER TOMORROW



INDIAN ENVIRONMENTAL
ENGINEERING

FROM WASTE TO CLEAN ENERGY

REAL SOLUTIONS.
REAL IMPACT.
A CLEANER INDIA.

-  RENEWABLE
ELECTRICITY
FOR HOMES
-  CLEANER AIR
FOR A HEALTHIER
INDIA
-  A GREENER
TOMORROW
FOR GENERATIONS

WASTE
FUELS
A BRIGHTER
INDIA

1. CLEAN SYNGAS INTAKE

Filtered, cooled syngas
(CO, H₂, CH₄) powers
high-efficiency turbines.

CLEAN SYNGAS
FROM PLASMA REACTOR



TURBINE GENERATOR
CONVERTING CLEAN SYNGAS
INTO ELECTRICITY

2. TURBINE GENERATION

Syngas drives turbines
to produce electricity
for the grid.

3. CLEAN EMISSIONS

Advanced filters ensure
ultra-low emissions.
Only clean steam and
minimal greenhouse gases
are released.

CLEAN
STEAM
OUT

4. ELECTRICITY TO THE CITY

Clean, renewable electricity
is sent to the city grid,
powering homes, hospitals,
schools and businesses.

POWER
TO GRID

PEOPLE
PLANET
PROGRESS
TOGETHER



CLEAN
CITIES
HEALTHY
PEOPLE
BRIGHTER
TOMORROWS



1. CLEAN SYNGAS
Filtered fuel from waste



2. DRIVE TURBINES
High-efficiency generation



3. PRODUCE ELECTRICITY
Renewable power for the grid



4. LOW EMISSIONS
Advanced filtration



5. BRIGHTER INDIA
Cleaner cities, healthier people



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

ENERGY RECOVERY

CAPTURING TODAY'S WASTE HEAT TO POWER A BRIGHTER INDIA.



PEOPLE
PLANET
PROGRESS
TOGETHER

> FROM PLASMA CHAMBER
EXTREME HEAT (3,000 – 5,000°C)

1. HEAT TRANSFER

Thermal energy from the process is captured through advanced heat exchangers.

WASTE HEAT
RECOVERY BOILER

TURNING WASTE
INTO CLEAN ENERGY

2. STEAM / THERMAL FLUID

Captured heat converts water or thermal fluid into high-temperature steam (for power generation).

3. ORC TURBINE

Steam/thermal fluid drives an Organic Rankine Cycle (ORC) turbine, generating clean electricity.

ORC TURBINE

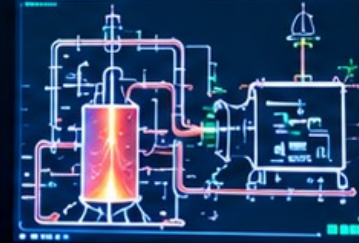
GENERATOR

4. CLEAN ELECTRICITY

Renewable electricity is fed to the grid to power homes, businesses and a greener India.

TO GRID

ENERGY RECOVERY SYSTEM



STEAM TEMP
320°C

TURBINE OUTPUT
2.4 MW

GRID EXPORT
CLEAN ENERGY



1. CAPTURE HEAT
From plasma process



2. GENERATE STEAM
via heat exchangers



3. DRIVE TURBINE
ORC technology



4. PRODUCE ELECTRICITY
Clean, renewable power



5. BRIGHTER INDIA
Cleaner cities, stronger communities



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

CLEAN ELECTRICITY FOR A BRIGHTER TOMORROW

TURNING WASTE INTO
RENEWABLE ENERGY
THAT POWERS HOMES,
BUSINESSES AND
A CLEANER TOMORROW.

1. SUPERHEATED STEAM / FLUID

Thermal energy from the
waste process drives the
turbine.

2. ORC TURBINE

Organic Rankine Cycle (ORC)
converts thermal energy into
mechanical energy.

3. GENERATOR

Mechanical energy drives
a generator to produce
clean, reliable electricity.

4. POWER CONDITIONING & TRANSFORMER

Electricity is stepped up
to the required voltage
and synchronized with
the grid.

PEOPLE
PLANET
PROGRESS
TOGETHER



HIGH TEMPERATURE
STEAM / THERMAL FLUID
FROM ENERGY RECOVERY

SUSTAINABLE
ENERGY
STRONGER
COMMUNITIES



TURBINE OPERATION



TURBINE SPEED
3,000 RPM
POWER OUTPUT
2.4 MW
GRID STATUS
SYNCHRONIZED

REAL TIME
CLEAN ENERGY
FOR A BRIGHTER
TOMORROW.



CLEAN CITIES
BRIGHTER
TOMORROWS.



2. DRIVE TURBINE
Generate mechanical
energy

3. PRODUCE ELECTRICITY
Clean, renewable power

4. CONNECT TO GRID
Reliable supply
for the grid

5. BRIGHTER TOMORROWS
Powering people,
progress and possibility



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

COOLING & STABILISATION

FROM HIGH-TEMPERATURE OUTPUT TO STABLE MATERIAL.

The processed material is cooled in a controlled system, converting it into a stable, vitrified, non-toxic material suitable for testing and future reuse.

PEOPLE
PLANET
PROGRESS
TOGETHER



1. CONTROLLED COOLING

High-temperature material enters a sealed cooling tunnel with precision water misting.

2. RAPID TEMPERATURE REDUCTION

Engineered cooling brings down the temperature safely, preventing structural stress and ensuring stable vitrification.

3. STABLE, VITRIFIED MATERIAL

The material is cooled into a hard, inert, glass-like aggregate, ready for quality testing and potential reuse in construction applications.

INDIAN ENVIRONMENTAL



FROM WASTE
TO A
STRONGER
TOMORROW



COOL TODAY
BUILD TOMORROW



12 - 13

WASTE DECOMPOSED
IN PLASMA CHAMBER



14 - 15

ENERGY RECOVERED
AND CONVERTED TO ELECTRICITY



17

PROCESSED MATERIAL
EMERGES



COOLING & STABILISATION



19

TESTING & VERIFICATION



20

FROM RESIDUE
TO RESOURCE



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

FROM RESIDUE TO REAL VALUE

VITRIFIED, INERT MATERIAL
GIVEN A SECOND LIFE
IN INFRASTRUCTURE.

PEOPLE
PLANET
PROGRESS
TOGETHER



TURNING
RESIDUE INTO
A STRONGER
TOMORROW



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

CLEAN CITIES
HEALTHY PEOPLE
BRIGHTER
TOMORROWS

A STRONGER
CLEANER
TOMORROW

1. VITRIFIED RESIDUE

Cooled material is a stable, non-toxic, glass-like aggregate (only 2–3% of original waste).

2. QUALITY TESTED

Material is tested for strength, leaching safety and compliance with construction standards.

3. USED IN INFRASTRUCTURE

Reused in road base, pavers, blocks and other construction applications — reducing the need for natural resources.

STRENGTH ✓
NON-TOXIC ✓
NO LEACHING ✓
CONSTRUCTION
GRADE ✓

ROAD BASE

PAVERS

CONSTRUCTION
BLOCKS

BUILT FROM
A CLEANER TOMORROW



1. COLLECT
Vitrified residue
from the process



2. TEST
Ensure safety
and quality



3. PROCESS
Shape for construction
use



4. REUSE
Roads, pavers, blocks
and more



5. GREENER TOMORROW
Less mining. Less landfill.
A brighter future.



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROW.



INDIAN ENVIRONMENTAL
ENGINEERING

TESTING & VERIFICATION

ENSURING SAFETY. PROVING VALUE.

The cooled, vitrified material is tested for strength, stability and non-toxicity, confirming it is inert and suitable for reuse in construction applications.

PEOPLE
PLANET
PROGRESS
TOGETHER

1. SAMPLE COLLECTION

Representative samples are taken from the cooled, stabilised material for laboratory analysis.

2. LAB ANALYSIS

Tests confirm the material is non-toxic, inert and meets construction-grade standards.

3. CERTIFIED FOR REUSE

The material is verified to be safe, non-leaching and suitable for use as aggregate in roads, pavers and construction blocks.

MATERIAL ANALYSIS RESULTS

✓ TOXIC LEACHING	NOT DETECTED
✓ HEAVY METALS	WITHIN SAFE LIMITS
✓ STRUCTURAL STRENGTH	SUITABLE
✓ pH STABILITY	STABLE
✓ INERT MATERIAL	CONFIRMED

TESTED.
SAFE.
READY
FOR A BRIGHTER
TOMORROW.

VITRIFIED RESIDUE
INERT. STABLE. REUSABLE.



12-13

WASTE DECOMPOSED
IN PLASMA CHAMBER



14-15

ENERGY RECOVERED
AND CONVERTED TO ELECTRICITY



17

PROCESSED MATERIAL
EMERGES



18

COOLING & STABILISATION



19

TESTING & VERIFICATION



20

FROM RESIDUE
TO RESOURCE



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROW.



INDIAN ENVIRONMENTAL
ENGINEERING

REUSE IN INFRASTRUCTURE

TURNING YESTERDAY'S
WASTE INTO TOMORROW'S
ROADS.

The inert, vitrified material is used as high-quality aggregate in road construction, pavers, bricks and other infrastructure projects, helping build stronger, more sustainable cities.

PEOPLE
PLANET
PROGRESS
TOGETHER



ROADS
Stronger & Durable



PAVERS
High Performance



BRICKS
Sustainable Building



INFRASTRUCTURE
Greener Cities

CIRCULAR SOLUTIONS FOR A BRIGHTER TOMORROW



12 - 13

WASTE DECOMPOSED
IN PLASMA CHAMBER



14 - 15

ENERGY RECOVERED
AND CONVERTED TO ELECTRICITY



17

PROCESSED MATERIAL
EMERGES



18

COOLING & STABILISATION



19

TESTING & VERIFICATION



20

FROM RESIDUE
TO RESOURCE



21

FROM RESIDUE
TO RESOURCE



REUSE IN
INFRASTRUCTURE



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

EMISSION CONTROL

CLEANER AIR
FOR HEALTHIER CITIES.

The gases from the processing system are treated through a multi-stage emission control system, ensuring compliance with environmental standards and cleaner air for our communities.

PEOPLE
PLANET
PROGRESS
TOGETHER



MULTI-STAGE TREATMENT FOR A CLEANER TOMORROW.

HOT FLUE GAS
FROM PROCESSING
CHAMBER

BLACKHOLE[®]
INTEGRATED MUNICIPAL SYSTEM

BLACKHOLE[®]
INTEGRATED MUNICIPAL SYSTEM

ALKALINE
DOSING

NEUTRALISES
ACIDIC GASES

WET DUST
COLLECTION

REMOVES FINE
PARTICULATES

CYCLONE

FURTHER REMOVES
PARTICULATES

CLEANER
AIR OUT

CLEAN
TECHNOLOGY
REAL IMPACT



- ✓ COMPLIANT
- ✓ RESPONSIBLE
- ✓ SUSTAINABLE

ENGINEERED FOR A **CLEANER, GREENER TOMORROW**



12 - 13

WASTE DECOMPOSED
IN PLASMA CHAMBER



14 - 15

ENERGY RECOVERED
AND CONVERTED TO ELECTRICITY



17

PROCESSED MATERIAL
EMERGES



18

COOLING & STABILISATION



19

TESTING & VERIFICATION



20

FROM RESIDUE
TO RESOURCE



21

FROM RESIDUE
TO RESOURCE



22

REUSE IN
INFRASTRUCTURE



23

EMISSION
CONTROL



23

EMISSION
CONTROL



BLACKHOLE[®]
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.

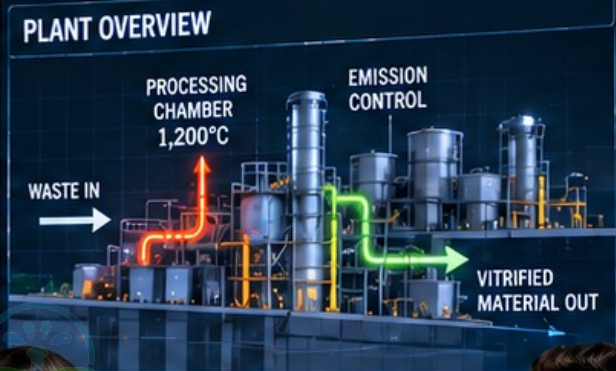
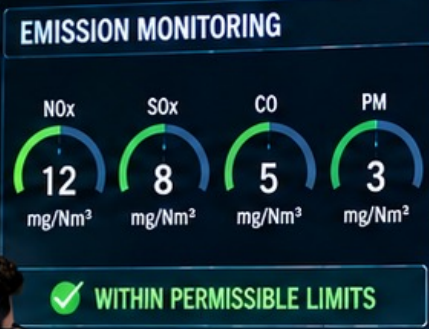
REAL-TIME MONITORING

TRANSPARENT OPERATIONS FOR A HEALTHIER TOMORROW.

Continuous monitoring ensures safe, efficient and compliant operations, meeting strict environmental standards and building trust with communities.

PEOPLE
PLANET
PROGRESS
TOGETHER

DATA TODAY
CLEANER
TOMORROWS



ENVIRONMENTAL COMPLIANCE

- ✓ AIR QUALITY
- ✓ WATER (IF APPLICABLE)
- ✓ NO HARMFUL RESIDUE
- ✓ REGULATORY STANDARDS

DATA LOGS & REPORTS

STATUS

ALL SYSTEMS NORMAL

✓

- MONITOR
- COMPLY
- REPORT
- IMPROVE



ACCOUNTABILITY
BUILDS A CLEANER,
GREENER FUTURE.



COMMUNITY ENGAGEMENT

CLEANER ENVIRONMENT.
STRONGER COMMUNITIES.

We work with local communities, municipalities and stakeholders to create awareness, build trust and ensure long-term positive impact through transparent communication and collaboration.

PEOPLE
PLANET
PROGRESS
TOGETHER



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

**CLEANER CITIES
BRIGHTER
TOMORROWS**

LESS LANDFILL

CLEANER AIR

HEALTHIER COMMUNITIES

A SUSTAINABLE TOMORROW

BLACKHOLE

WASTE SOLUTIONS FOR PEOPLE AND GENERATIONS TO COME.

AWARENESS PROGRAMS
Educating communities about responsible waste management.

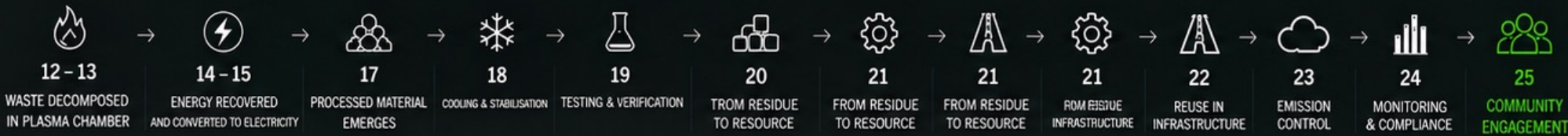
STAKEHOLDER COLLABORATION
Working with municipalities, NGOs and local leaders.

EMPLOYMENT OPPORTUNITIES
Creating green jobs and supporting local economies.

LONG-TERM IMPACT
Building healthier, more resilient and sustainable communities.

**CLEANER
GREENER
HEALTHIER
TOGETHER**

A CLEAN ENVIRONMENT BUILDS BRIGHTER FUTURES.



CLEANER TODAY. BRIGHTER TOMORROWS.

BLACKHOLE PROCESS | A CLEANER TOMORROW

A CLEANER TOMORROW

TURNING WASTE INTO OPPORTUNITY.

Cleaner cities. Healthier people.
Stronger communities.
A more sustainable planet.
Together, we can build
a brighter tomorrow.

PEOPLE
PLANET
PROGRESS
TOGETHER



HEALTHIER COMMUNITIES

Improved quality
of life for generations.



CLEANER ENVIRONMENT

Reduced waste.
Cleaner air and water.



STRONGER ECONOMIES

Green jobs and
new opportunities.



SUSTAINABLE FUTURE

A better planet
for tomorrow.

WASTE TODAY.
BRIGHTER TOMORROWS.



12-13

WASTE DECOMPOSED
IN PLASMA CHAMBER



14-15

ENERGY RECOVERED
AND CONVERTED TO ELECTRICITY



17

PROCESSED MATERIAL
EMERGES



18

COOLING & STABILISATION



19

TESTING & VERIFICATION



20

FROM RESIDUE
TO RESOURCE



21

FROM RESIDUE
TO RESOURCE



22

FROM RESIDUE
TO RESOURCE



22

REUSE IN
INFRASTRUCTURE



23

EMISSION
CONTROL



24

MONITORING
& COMPLIANCE



25

COMMUNITY
ENGAGEMENT



26

A CLEANER
TOMORROW



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEANER TODAY. BRIGHTER TOMORROWS.



BLACKHOLE
INTEGRATED MUNICIPAL SYSTEM

CLEAN
CITIES
BRIGHT
TOMORROWS



INDIAN ENVIRONMENTAL
ENGINEERING

*A Cleaner
Tomorrow
is Possible.*

PEOPLE
PLANET
PROGRESS
TOGETHER.

BLACKHOLE PROCESS | INSTALLED PLANTS

PROVEN IN INDIAN CITIES

Real deployments. Measurable impact.

Operational BlackHOLE® installations in Hyderabad and Lucknow demonstrate the system's proven capacity to address the waste management challenges of large Tier 1 and Tier 2 Indian cities — reducing landfill dependency and improving municipal sanitation outcomes in direct compliance with **SWM Rules 2016** and **SBM-Urban** mandates.



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

**CLEANER
CITIES
BRIGHTER
TOMORROWS**



*Cleaner
India
Stronger
Together*



HYDERABAD
TELANGANA

HYDERABAD

Urban Scale. Real Results.

Urban municipal waste processing for a major metropolitan authority with high-density mixed waste volumes — demonstrating the system's performance at scale in one of India's fastest-growing cities.



HIGH-DENSITY
URBAN WASTE



PROVEN
PERFORMANCE
AT SCALE



SUPPORTING
CLEANER
COMMUNITIES



LUCKNOW
UTTAR PRADESH

LUCKNOW

Solving Critical Municipal Challenges.

Deployed to address overflowing landfill crisis and improve civic sanitation standards in the state capital of Uttar Pradesh, supporting the city's SWM Rule 26 dumpsite remediation obligations.



REDUCES
LANDFILL
DEPENDENCY



IMPROVES
CIVIC
SANITATION



COMPLIES WITH
SWM RULES 2016
& SBM-URBAN



PEOPLE | PLANET | PROGRESS | TOGETHER.



BLACKHOLE PROCESS | INSTALLED PLANTS

FLAGSHIP INDIAN INSTALLATIONS

Scaling clean solutions for India's leading cities.

As India's two most prominent technology and commercial hubs, Bangalore and Mumbai represent flagship installations for the BlackHOLE® system — demonstrating scalability and regulatory acceptance in the country's most scrutinised and compliance-intensive urban environments.

BANGALORE
INDIA'S TECH HUB

MUMBAI
INDIA'S COMMERCIAL CAPITAL



CLEANER
CITIES
BRIGHTER
TOMORROWS



*Cleaner
India
Stronger
Together*



BANGALORE
KARNATAKA

Home to
TeslaGREEN



BANGALORE

Reference & Demonstration

Home city of TeslaGREEN. The Bangalore installation serves as the company's primary reference site and live demonstration facility for prospective municipal clients — visitors can observe the system operating under real municipal waste conditions.



LIVE
DEMONSTRATION
FACILITY



SHOWCASING
REAL-WORLD
PERFORMANCE



REFERENCE
SITE FOR
MUNICIPAL CLIENTS



MUMBAI
MAHARASHTRA



MUMBAI

Complex Urban Deployment

India's largest city and commercial capital demonstrates the system's capacity to integrate into complex, high-volume urban waste logistics networks — the most demanding operational environment in the country.



INTEGRATES
WITH COMPLEX
WASTE LOGISTICS



HANDLES
HIGH-VOLUME
URBAN WASTE



PROVEN IN
COMPLIANCE-
INTENSIVE
ENVIRONMENTS



BLACKHOLE®
INTEGRATED MUNICIPAL SYSTEM

PEOPLE | PLANET | PROGRESS | TOGETHER.



BLACKHOLE PROCESS | INSTALLED PLANTS

ENGINEERED FOR EXTREMES

Same technology. Different worlds. Real impact.

The deployments in Ladakh and the Philippines are landmark installations — proving that the BlackHOLE® system functions effectively in extreme climatic and geographically remote conditions where conventional waste infrastructure is entirely unviable. These deployments validate the system's adaptability far beyond standard municipal environments.



CLEANER
CITIES
BRIGHTER
TOMORROWS



Cleaner
Stronger
Greener
Together



LADAKH

High Altitude. High Reliability.

High-altitude, extreme-weather installation serving a remote Himalayan community — validating cold-climate operational performance without grid electricity access, at elevations exceeding 3,500 metres above sea level.



OPERATES
IN EXTREME
COLD CLIMATE



FUNCTIONS
WITHOUT GRID
ELECTRICITY



PROVEN AT
> 3,500 M
ALTITUDE



PHILIPPINES

Tropical Conditions. Global Reach.

International deployment demonstrating cross-border regulatory compliance and the system's adaptability to tropical, island-environment waste management challenges where centralised landfill infrastructure is impractical.



SUITABLE FOR
TROPICAL & ISLAND
ENVIRONMENTS



COMPLIES WITH
INTERNATIONAL
REGULATIONS



ADAPTABLE TO
REMOTE & OFF-GRID
COMMUNITIES



PEOPLE | PLANET | PROGRESS | TOGETHER.



BLACKHOLE PROCESS | INSTALLED PLANTS

GLOBAL FOOTPRINT IN ACTION

From India to Southeast Asia. A cleaner tomorrow.

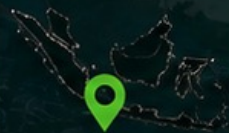
The ASEAN installations in Indonesia and Singapore establish TeslaGREEN's international credibility and expand the BlackHOLE® footprint into some of the world's most sophisticated and stringent waste management regulatory environments — benchmark validations of the system's global-standard emission performance.



CLEANER
CITIES
BRIGHTER
TOMORROWS



Cleaner
Stronger
Greener
Together



INDONESIA
ARCHIPELAGO
NATION



ISLAND
COMMUNITIES



INDONESIA

Modular Solutions for Dispersed Communities.

Addressing the archipelago's acute municipal solid waste crisis across dispersed island communities where centralised landfills are physically and logistically impractical — validating modular deployment capability.



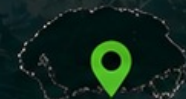
MODULAR
DEPLOYMENT



SUITABLE FOR
DISPERSED
LOCATIONS



ADDRESSES
MUNICIPAL
WASTE CRISIS



SINGAPORE
CITY STATE



HIGHLY
REGULATED
ENVIRONMENT

SINGAPORE

World-Class Standards. Proven Performance.

Deployed in one of Asia's most advanced and environmentally regulated urban environments — a benchmark validation of the system's world-class emission standards against some of the planet's strictest regulatory requirements.



MEETS
STRINGENT
EMISSION STANDARDS



VALIDATED IN
ADVANCED URBAN
ENVIRONMENT



STRENGTHENS
INTERNATIONAL
CREDIBILITY



PEOPLE | PLANET | PROGRESS | TOGETHER.

A CLEANER INDIA
A BRIGHTER TOMORROW

BLACKHOLE

ADVANCED WASTE MANAGEMENT SOLUTION

TURNING TODAY'S WASTE
INTO A CLEANER TOMORROW



WASTE
TODAY
CLEAN
TOMORROW

LESS LANDFILL
CLEANER CITIES
HEALTHIER PEOPLE
A GREENER INDIA

A STEP TOWARDS
CLEANER, GREENER CITIES



MANAGE
WASTE BETTER



PROTECT
OUR ENVIRONMENT



BUILD
HEALTHIER COMMUNITIES



ENABLE A
SUSTAINABLE FUTURE

CLEANER TODAY. BRIGHTER TOMORROWS

WASTE REIMAGINED.
CITIES TRANSFORMED.
LIVES IMPROVED.

Together, we can turn
today's waste into
cleaner cities, healthier
communities and
a brighter tomorrow.

PEOPLE
PLANET
PROGRESS
TOGETHER



CLEANER
CITIES
BRIGHTER
TOMORROWS

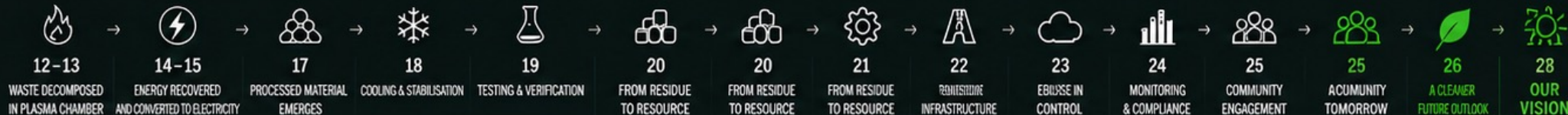


PEOPLE
PLANET
PROGRESS
TOGETHER.



CLEAN
CITIES
STRONGER
PEOPLE

A CLEANER TOMORROW IS A STRONGER TOMORROW



CLEANER TODAY. BRIGHTER TOMORROWS.

THANK YOU

FOR A CLEANER, SMARTER TOMORROW



INDIAN ENVIRONMENTAL ENGINEERING
Cleaner people. Brighter cities. Healthier India.



**A CLEANER TOMORROW
STARTS TODAY.**