



# CERTIFICATE OF ACHIEVEMENT

## ***INDUSTRY EXCELLENCE***

*The Certificate is Proudly Awarded to*

**GS Clean Energy Pte Ltd**  
Eco Waste Management System

*For their Outstanding Solution  
in the World of Safety and Health Asia Award 2023*

*Organised by World of Safety and Health Asia to recognise excellence  
within the industry based on new and innovative solutions  
that improve workplace safety and health.*

A white handwritten signature of Raymond Wat, written in a cursive style.

**Raymond Wat**

Founder of the World of Safety and Health Asia



**Our Awards Ceremony is taking place  
on 7th of September 2023!**

A graphic with a dark red background and a yellow diagonal banner in the top-left corner that reads "SAVE THE DATE". The main text in the center is "AWARD 2023" in large white letters, with "LIVE CEREMONY" in yellow below it. At the bottom, it says "7TH SEPTEMBER 2023 | 3.30PM - 5.30PM (GMT +8)" and "LIVE STREAM ON" followed by icons for LinkedIn, Facebook, and YouTube.

### Why You Should Join Us

1. **Exciting Giveaways:** Attend this live ceremony for a chance to win safety-related products! We



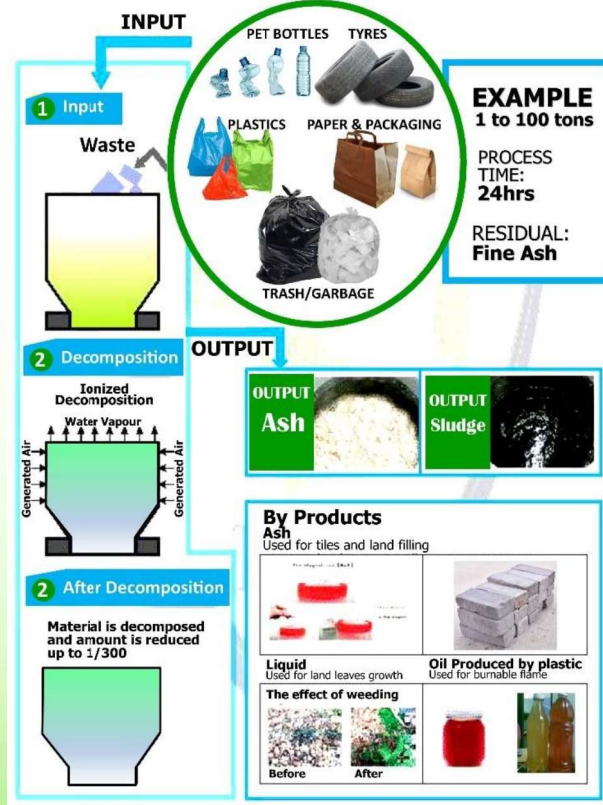
# Eco Waste Management System



**Eco Waste Management System** offers an efficient and commercially viable, eco-friendly, permanent solution to waste management. This new, state-of-the-art technology does not require any input energy source like fuel or electricity, to manage the waste.

**EWMS** Technology is flexible in handling different types of waste. In the Philippines, the technology will be used to process residual municipal solid waste in compliance with Republic Act (RA) 9003. It also has the capacity to process bulky wastes such as used tires, PET bottles, plastic bags and Styrofoam.

## DISPOSAL PROCESS



## HOW ECO WASTE MANAGEMENT SYSTEM WORKS?

- Waste is fed into the chamber of the equipment at uniform intervals. During the commissioning process an initial start ignition is done using camphor/dry-wood, destruction starts slowly by splitting the molecules into atoms. Further ionization of atoms into electrons, protons and neutrons is called the “ionization state”. Acceleration of electrons creates a strong energy which increases and maintains the heat in the chamber.
- On the other side a small amount of atmospheric air is allowed to pass through a strong magnetic field into the oxygen starved chamber. During this operation, oxygen molecules split into elemental oxygen having a negative charge. This atomic oxygen will oxidize the perfectly organic surface and change organic matter into desperate organic oxide. This reaction is induced by exothermic phenomenon, creating a thermal condition of +/- 200°C accelerating a reaction which will create initial decomposition.
- Upon achieving 200°C (by initial firing), then accelerating to 500-1000°C through magnetized ionization, a thermal vibration will be achieved.
- The decomposition of waste takes place stack wise so that the heat energy generated will be continuous. Located at the bottom of the destruction chamber is a tubular type radiator positioned near the lower layer of the equipment where ash gets deposited and separated. The waste heat is recovered through a tubular heat sink arranged near the upper layer of the deposited ash of a hearth center section of said decomposition chamber and said hearth periphery. This entire structure will support heat transfer, recovering the waste heat and applying it back to the wet waste, thus reducing the moisture content dramatically.
- The flue gasses emitted from the decomposition chamber is released by induced draft. The emission may contain some toxic components like **dioxin** and **uran**, **heavy metals**, **nitrogen oxides**, etc., which are treated by the 3 stage wet scrubber and activated carbon filters, containing and reducing emissions to achieve the prescribed norms.



## BENEFITS & SAVINGS

- De-Centralizes handling of waste
- Reduces Transportation Costs
- Avoids Open Burning of Garbage
- Reduces burden on Landfills
- Phases Out Landfills with Zero Waste
- Saves the Environment from Air, Soil, Ground Water Pollution

## TYPES OF WASTE

- Waste Paper
- Tires & Tubes
- Municipal Waste
- Hospital Waste (Special Machine)
- Food Waste
- Plastic Waste

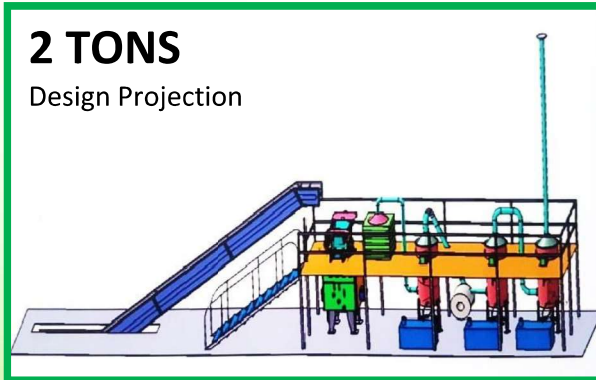
## FEATURES

- **NO ELECTRICITY, NO FUEL, NO BURNING, SELF-SUSTAINING:** Magnetized ionization technology is used. The system doesn't need the combustion process, neither electricity nor fossil fuel is used.
- **US TECHNOLOGY:** System is based on United States design and process.
- **PROCESS AT MAGNETIZED STATE:** After initial start-up fire, destruction starts slowly by splitting the molecules into atoms. These atoms are further ionized as electron, proton and neutron and this state is called "magnetized ionization stage".
- **SMALL FOOTPRINT:** A small amount of floor space is required to support the system, this is based on the Unit Size and should be located in close proximity to the Unit.
- **QUICK & FAST:** Decomposition of waste takes place at a fast rate, within 1-1.5 hours a per load of waste.
- **US TECHNOLOGY:** The Eco Waste Management System works on a Programmed Magnetized Oxygenated State that eliminates any and all kinds of environment pollutants
- **AVOIDS LANDFILLING AND DUMP YARDS**  
Reduces the volume of MSW in the ratio of 1/200-1/300 times the input waste
- **LOW COST & LESS MAINTENANCE:** Low capital expenditure with minimal running cost
- **MOBILITY:** Compact & Easy for Mobility
- **ENVIRONMENT FRIENDLY**  
Helps conserve the Environment by adhering to emission norms; also helps curtail Air, Soil & Ground Water Pollution; Any non-segregated Municipal Solid Waste (MSW) can be handled effectively.



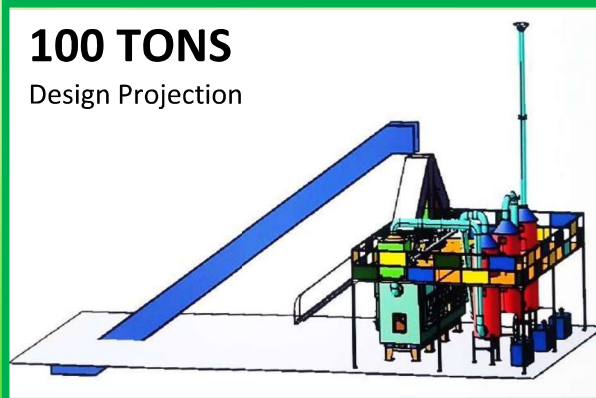
## 2 TONS

Design Projection



## 100 TONS

Design Projection



## WARRANTY

- One (1) Year Warranty on Parts and Services.
- Annual Maintenance Contract required.
- The solution provider will provide training for buyer's personnel on how to operate "Eco Waste Management System."



## Eco Waste Management System

Available in the following capacities:

- 2 Ton Capacity per Day
- 5 Ton Capacity per Day
- 10 Ton Capacity per Day
- 20 Ton Capacity per Day
- 25 Ton Capacity per Day
- 40 Ton Capacity per Day
- 50 Ton Capacity per Day
- 60 Ton Capacity per Day
- 80 Ton Capacity per Day
- 100 Ton Capacity per Day

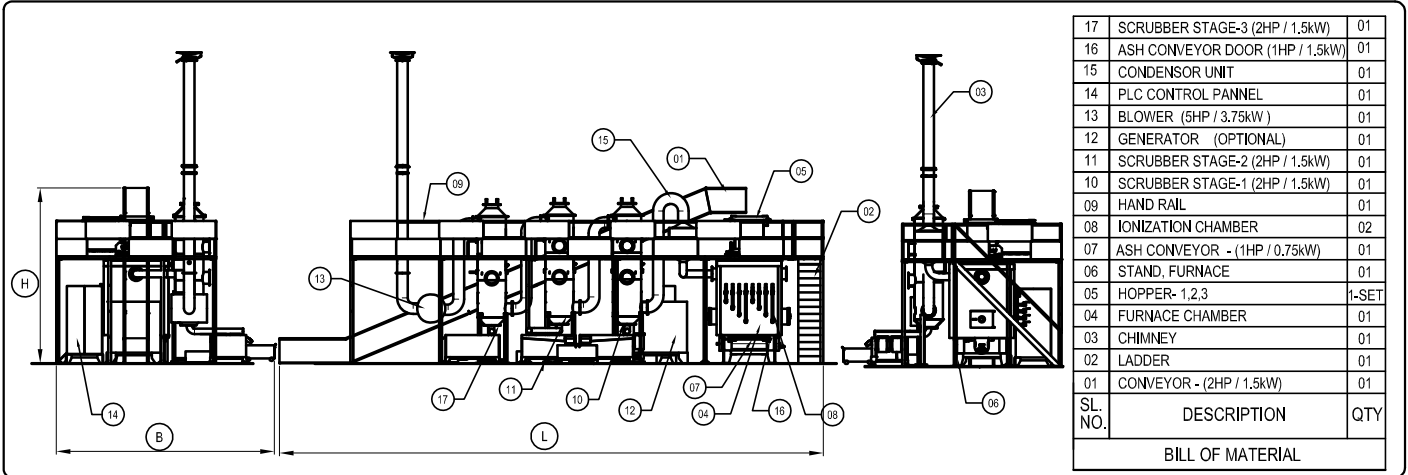
(Capacity calculated on a 24 Hour basis)

For more inquiries, please visit or call us:

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WhatsApp: +65-91498562 / +65-93675494

All countries inquiries are welcome.

# Equipments & Products



17	SCRUBBER STAGE-3 (2HP / 1.5kW)	01
16	ASH CONVEYOR DOOR (1HP / 1.5kW)	01
15	CONDENSOR UNIT	01
14	PLC CONTROL PANNEL	01
13	BLOWER (5HP / 3.75KW )	01
12	GENERATOR (OPTIONAL)	01
11	SCRUBBER STAGE-2 (2HP / 1.5kW)	01
10	SCRUBBER STAGE-1 (2HP / 1.5kW)	01
09	HAND RAIL	01
08	IONIZATION CHAMBER	02
07	ASH CONVEYOR - (1HP / 0.75kW)	01
06	STAND, FURNACE	01-SET
05	HOPPER- 1.2.3	1-SET
04	FURNACE CHAMBER	01
03	CHIMNEY	01
02	LADDER	01
01	CONVEYOR - (2HP / 1.5kW)	01
SL. NO.	DESCRIPTION	QTY
BILL OF MATERIAL		

## ECO WASTE MACHINE

SL. NO.	SPECIFICATION								
01	MODEL	- 2 TON	- 5 TON	- 10 TON	- 20 TON	- 40 TON	- 60 TON	- 80 TON	- 100 TON
02	LxBxH OF CHAMBER	1.5x1.5x2 m	1.5x1.5x2m	2x1.5x2 m	2.5x1.5x2 m	3x1.5x2 m	4.5x1.5x2 m	6x1.5x2 m	7.5x1.5x2 m
03	BASE CLEARANCE	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm	350 mm
04	MINIMUM HEIGHT	5.5m	5.5m	5.5m	5.5m	7.25m	7.25m	7.25m	7.25m
05	DECOMPOSITION CAPACITY	2T	5 T	10 T	20 T	40 T	60 T	80 T	100 T
06	DECOMPOSITION METHOD	OXY-ION MAGNETIC DECOMPOSITION							
07	MANUAL / AUTOMATIC	BOTH AVAILABLE							
08	No of CORES	8 APROX	16 APROX	22 APROX	26 APROX	36 APROX	46 APROX	74 APROX	74 APROX
09	POWER REQUIRED	13 kW	13 kW	13 kW	13 kW	15 kW	19 kW	19 kW	19 kW
11	No of HOPPERS / SIZE	1 / 0.8m x 0.8m	1 / 0.8m x 0.8m	1 / 0.8m x 0.8m	1 / 0.8m x 0.8m	2 / 0.8m x 0.8m	2 / 0.8m x 0.8m	3 / 0.8m x 0.8m	3 / 0.8m x 0.8m
12	MONITORING SYSTEM	PLC BASED							
13	LxBxH OF MACHINE FLOOR	15.5mx6.5mx5 m	15.5mx6.5mx5 m	16mx6.5mx5 m	17mx6.8mx5.5m	17.5mx6.8mx7m	17.5mx7mx7m	15mx7.5mx7m	16mx10.5mx7.5m
14	EMERGENCY STOP FEATURE	AVAILABLE							
15	HAND RAILS FOR SAFETY	AVAILABLE							
16	ELECTRICAL SYSTEM	3 PH, 380V / 440V SPECIFIC TO COUNTRY REQUIREMENT							
17	POWER REGENERATION	_____	_____	_____	_____	_____	OPTIONAL	OPTIONAL	OPTIONAL
18	DUTY CYCLE - 24hrs	CONTINOUS							
19	LOADING CYCLE TIME	2-3hrs DEPENDS ON CALORIFIC VALUE OF WASTE							
20	LOADING TYPE	AUTO / MANUAL CONVEYOR							
21	WASTE HANDLING	DEPENDS ON THE CUSTOMER							
22	PLC CONTROLLED BUILT-IN DOORS FOR OPEN & CLOSE	AVIALABLE							
23	MANLESS HANDLING OF ASH	SCREW TYPE CONVEYOR AVAILBLE							
24	SURFACE PROTECTION	HEAT RESISTANT PAINT PROTECTED WITH REFRACTION BRICKS AND CERMIC WOOL,							
25	MATERIAL	AS PER DIMCO COMPANY STD							
25	SAFETY INSTRUCTIONS	PLACARDS DISPLAY							
26	OPERATIONAL INSTRUCTIONS	PLACARDS DISPLAY							
27	MAINTAINANCE INSTRUCTIONS	PLACARDS DISPLAY							
28	DO 'S & DONOT'S	PLACARDS DISPLAY							
29	EMMISSION CONTROL MONITOR	WET SCRUBBER 3-Ø0.8m x 3.4m	WET SCRUBBER 3-Ø0.8m x 3.4m	WET SCRUBBER 3-Ø0.8m x 3.4m	WET SCRUBBER 3-Ø0.8m x 3.4m	WET SCRUBBER 3-Ø0.8m x 3.4m	WET SCRUBBER 3-Ø1.2m x 3.4m	WET SCRUBBER 3-Ø1.2m x 3.4m	WET SCRUBBER 3-Ø1.2m x 3.4m
30	SUCTION BLOWER	5 HP / 3.7KW	5 HP / 3.7KW	5 HP / 3.7KW	5 HP / 3.7KW	7.5HP / 5.6KW	7.5HP / 5.6KW	10HP / 7.45KW	10HP / 7.45KW

NOTE : SPECIFICATIONS MAY CHANGE WITH OUT INTIMATION FOR CONTINOUS IMPROVEMENT.

MANUFACTURER

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