

The Connection Between Rome, Energeo Megalopolis, Sustainable Renewable Energy, WASTEBEGONE, Bamboo, and Concrete?

Rome was not built in a day and was created more proficiently than most people think.

Ancient Romans were the masters of building and engineering, perhaps most famously represented by the aqueducts. And those still functional marvels rely on a unique construction material: *pozzolanic concrete*, a spectacularly durable concrete that gave Roman structures their incredible strength.

Even today, one of their structures – the *Pantheon*, is still intact and nearly 2,000 years old – holds the record for the world's largest dome of unreinforced concrete.

The properties of this concrete are attributed to its ingredients: pozzolana, a mix of volcanic ash – named after the Italian city of Pozzuoli, where a significant deposit of it can be found – and lime. When mixed with water, the two materials can react to produce strong concrete.

One fact to understand is the mass amount of CO2 generated in making concrete; you would think you were looking at telephone numbers.

Energeo has approached this subject like all that we do, sincerely, logically, and not just in the laboratory but in the field with fully proven production over the years.

After twenty-three years of cutting-edge solar manufacturing from scratch, secure and safe Lead Crystal Battery Storage, and our ability to convert recyclable waste to sustainable energy, we have learned more than the average company.

For those that wish more background on solar and battery storage, please click and read.

I want to concentrate on converting waste, wood, coal, plastics, and all other mixed waste that we individually handle daily. Around six pounds of waste per person is supposedly disposed of daily.

Only 5.4% is recycled, and the rest is placed not so gently in those glorious smelly, diseased-ridden landfills.

So what has Energeo done about it?

The Romans used limestone mixed with water and silt.

Ceramic ash is formed at a high temperature, which they could not achieve before.

Mixing with our ash, the ceramic ash from WasteBgone, you create a 300% stronger concrete with the correct mixing ratio.

The following information will answer most of your questions; if not, communicate with us.

THE ECONOMIC, INTEGRAL, AND GREEN SOLUTION TO YOUR SOLID WASTE PROBLEM

Self-sustainable converting waste into resources

Waste is not only an environmental problem; it is also considered an economic loss. Both alternatives require additional financial resources, whether that waste is decomposed or recycled. The WASTE**BGONE** Eco Decomposition System solves your solid waste problem by converting solid waste into renewable resources and energy, but it's also self-sustaining and contributes to the circular economy!

Running on waste and air

Without having to segregate, the WASTE**BGONE** decomposes - in the ratio of 1/200 - 1/300 times the input volume - a variety of solid waste: municipal, food, leather, PET, BUTYL, E-waste, paper, plastics, rubber, and medical waste. And because the applied 'Oxy-Ion Magnetic Decomposition' technology only requires atmospheric air, no electricity or fuel is required. And on top of that, due to that same innovative technology and three wet scrubbers, the WASTE**BGONE** emits only clean, non-toxic air.

A source of free green energy and renewable products

The WASTE**BGONE** not only generates considerable amounts of free green energy that can be stored to realize energy savings or provide entire communities with energy.

As a result of the applied technology, WASTE**BGONE** also produces by-products that interest various industries. If mixed solid waste is processed, the resulting eco-friendly ash can be used as an ingredient in concrete, tiles, and bricks.

When mixed with water, the ash can also improve soil conditions. In the case of non-mixed solid waste containing a substantial amount of plastics, the WASTE**BGONE** also produces bio-sludge that can be processed into biofuel/oil.

Affordable, upscalable, and mobile

The WASTE**BGONE** is not only available in a wide range of waste processing and power generating capacities, but the maintenance costs are also minimal, and it doesn't require highly skilled operators. This solution is affordable to smaller organizations with limited budgets and human resources. The installation can be upscaled easily by putting two or more units in line to meet an increasing waste processing demand.

And due to its modular and compact design, the WASTE**BGONE** can be relocated easily.

Superior to Incineration and Waste to Energy alternatives

The PLC-operated WASTE**BGONE** offers numerous advantages over incinerators and Waste to Energy alternatives.

WASTEBGONE FEATURES-

This new, state-of-art technology does not require any input energy source, like fuel or Electricity, to manage the waste. It only requires minimal energy to run the scrubbers and conveyors.

The system uses magnetic ionized heat to treat and decompose waste. It is flexible in handling different types of waste.

It can process bulky wastes such as used tires, PET bottles, plastic bags, and Styrofoam.

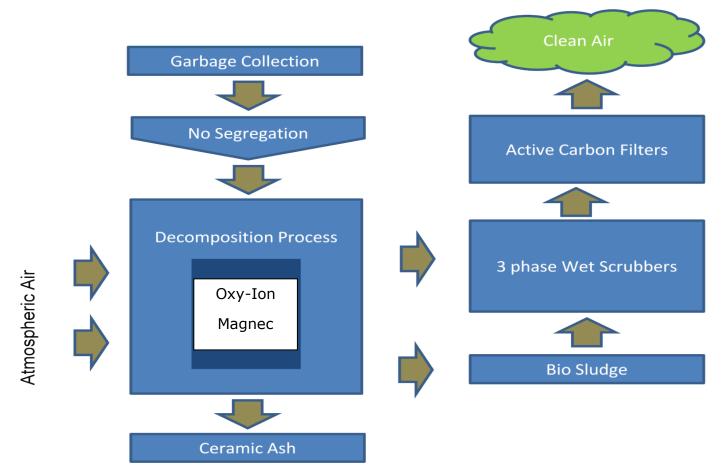
- **NO ELECTRICITY, NO FUEL, NO BURNING, SELF-SUSTAINING** Magnetized ionization technology is used. The system does not need the combustion process. Neither Electricity nor fossil fuel is used.
- PROCESS AT MAGNETIZED STATE After the initial start-up fire, destruction starts slowly by spitting the molecules into atoms. These atoms are further ionized as electrons, protons, and neutrons, and this state is called the "magnetized ionization stage."
- **SMALL FOOTPRINT** A small floor space depending on the system size, sufficient to accommodate the system anywhere close to the source.
- **QUICK & FAST** The machine can be operated 24/7. The decomposition of waste takes place faster in a 1 to 1.5-hour period for the single batch load.
- **US TECHNOLOGY** WASTE**BGONE** is based on a United States design and process that works on a Programmed Magnetized Oxygenated State that eliminates environmental pollutants.
- 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.

WASTEBGONE BENEFITS AND SAVINGS -

- 1. Saves the Environment from Air, Soil, Ground Water Pollution
- 2. Reduces Burden on Landfills
- 3. It avoids the Open Burning of Garbage
- 4. It can be implemented as a Decentralized approach to waste management too
- 5. Low Capital Expenditure with minimal running cost

HOW DOES WASTEBGONE WORK?

The decomposition process is ignited by directing a small amount of heated atmospheric air(oxygen) through the magnetic field created by the WASTE**GONE**'s magnet cores in the oxygen-starved decomposition chamber.



The heated oxygen absorbed by the strong magnetic field generates the required high temperature (200°C - 1200°C) and also forms highly reactive, negatively charged oxygen ions. The heat inside the chamber decomposes the waste, and the highly oxidative oxygen eliminates by oxidation of the dioxins and other harmful compounds resulting from the decomposition process.

The emission is then treated through 3 wet scrubbers to bring it well under the norms required by strict U.S. and European emission regulations.

HOW IS WASTEBGONE DIFFERENT THAN INCINERATION?

Solid Waste Disposal has been a major issue in many countries, and there is a need to eliminate problems associated with landfilling or even open burying or burying garbage.

Although landfills are one of the most widely used waste disposal methods, it is common knowledge that all landfills leak. This leakage often contains heavy metals and other toxic substances, which can contaminate ground and water resources. Besides leaching, vaporization and spontaneous fires are also dangerous in landfills. Incineration is the process of destroying waste through burning. This process is associated with a major risk of generating and dispersing significant contaminants and toxic substances due to various contents in the trash. The residue ash and the gasses released during the burning process are often very unhealthy. Incineration also leads to the loss of trace elements which could be recovered had they been sorted and processed separately.

Additional problems created by using Incineration are as follows -

Electricity, kerosene, or other types of fuel power it

WA different secondary combustion system is required

We operates at very high temperatures

Required trained technicians to operate

Maintenance is very high

It can only be used primarily for dry waste

Wery expensive to purchase and operate

EXEMPTION IN THE SECOND STREET STREET IN THE SECOND STREET STREET

Example: Second Second

The WASTE**BGONE** solution is a unique, new technology in the field of waste management. The environmentally friendly machine requires no electricity, gasoline, kerosene, or other fuel, which makes the running cost of the machinery almost NIL. It requires no additional equipment, and any non-specialist can efficiently operate it. With the WASTE**BGONE** solution, waste is destructed scientifically by the intake of small atmospheric air through ionization.

Because of the presence of the ionization state, dioxins and furans are well under the norms. After the destruction of the waste, residue collected from the closed chamber will have specific magnetic/ceramic properties, so the ash is called ceramic ash and can be reused in cement and ceramic tile industries.

FEATURE	WASTEBGONE	INCENERATOR
No electricity or fuel is required – 100%	YES	NO
self-sustaining		
Waste is destructed scientifically by the	YES	NO
intake of small atmospheric air through		
plasma		
No additional equipment is required	YES	NO
Adopts advanced Plasma Magnetic heat	YES	NO
decomposition		
Operates at very safe temperatures	YES	NO
Any non-specialist can operate the machine	YES	NO

Maintenance cost is meager – No moving parts in the core machine	YES	NO
It can be used for any municipal solid waste	YES	NO
Comparatively low in cost	YES	NO
Due to the controlled oxygen in flow	YES	NO
technique, the dioxins and furan levels in		
the emissions are very low		
Dioxin and furan are well under the norms	YES	NO
due to the presence of a plasma state		
The ash can be reused in the cement and	YES	NO
ceramic tile industries		
Running cost is almost nil	YES	NO
Can be decentralized accordingly	YES	NO
It can be easily transported	YES	NO
Has a minimum 15-year lifespan	YES	NO
It can run continuously for days	YES	NO
It can be operated with less space	YES	NO

THE ECONOMICS OF THE WASTEBGONE SOLUTIONS -



The MSW to Ash Base solution will use NON-SEGREGATED MUNICIPAL WASTE and convert it into <u>Ceramic Ash</u> that <u>can be sold to the Cement Factories for use in Burners</u>. The metals and glass in the MSW need to be separated from the Ceramic Ash.

Model	Capacity (Ton / 24 hrs)	OUTPUT Ceramic Ash (Per Day)
WG5	5 Tons	250 kgs
WG10	10 Tons	500 kgs
WG20	20 Tons	1,000 kgs
WG40	40 Tons	2,000 kgs
WG60	60 tons	3,000 kgs
WG80	80 Tons	4,000 kgs
WG100	100 Tons	5,000 kgs

As regards the Municipal Waste and Plastic Waste generated, we can also use **an add-on** "Plastics to Oil" module with our Waste**BGONE** solution.

We use the heat that is generated in the MSW to Ash solution to melt the plastics waste (HDPE, LDPE, PP, PS, PET, PVC, and Others) using a pyrolysis process to convert it into –

- Plastic Oil can be blended with Diesel in a 60% 40% ratio to be used in the Garbage Collecting Vehicles of the Urban Local Bodies
- Syngas that is used back in the MSW to Ash solution for the ionization process
- Carbon Black used to strengthen rubber in the Tyre Industry

Model	Capacity (Ton / 24 hrs)	Ουτρυτ						
		Pyrolysis Oil (Per Day)	Sync Gas (Per Day)	Carbon Black (Per Day)				
PP5	5 Tons	2,500 Liters	1,000 kgs	1,500 kgs				
PP10	10 Tons	5,000 Liters	2,000 kgs	3,000 kgs				
PP20	20 Tons	10,000 Liters	4,000 kgs	6,000 kgs				
PP40	40 Tons	20,000 Liters	8,000 kgs	12,000 kgs				
PP60	60 tons	30,000 Liters	12,000 kgs	18,000 kgs				
PP80	80 Tons	40,000 Liters	16,000 kgs	24,000 kgs				
PP100	100 Tons	50,000 Liters	20,000 kgs	30,000 kgs				

Please check current market prices for the output from the "Plastic to Oil" module

- Plastic Oil –
- Carbon Black –
- Syngas that is used back in the MSW to Ash solution for the ionization process

Alternatively, we can also have **another add-on** "ORC to Electricity" module with the "MSW to Ash" Base solution. The "ORC to Electricity" can be deployed along with the "Plastics to Oil" module, **or** if the Plastics Waste is not segregated, then as an add-on which can take the heat generated by the MSW to Ash solution to generate Electricity (in this case, the output mentioned above from the "Plastics to Oil" module are not possible and there is only electricity generation.)

Model	Capacity (Ton / 24 hrs)	OUTPUT Green Power (KW / Hour)
RC5	5 Tons	60 kW
RC10	10 Tons	120 HW
RC20	20 Tons	220 KW
RC40	40 Tons	400 KW
RC60	60 tons	620 KW
RC80	80 Tons	850 KW
RC100	100 Tons	1,200 KW

TECHNICAL SPECIFICATIONS OF THE WASTEBGONE SOLUTION

	MODEL						
	WG5T	WG10T	WG20T	WG40T	WG60T	WG80T	WG100T
Capacity (Ton / 24 hrs)	5	10	20	40	60	80	100
Dimensions (L x W X H) in Meters							
Structure	17.5 x 8.5 x 5.0	18.0 x 8.5 x 5.0	19.0 x 8.8 x 5.5	19.5 x 8.8. x 7.0	19.5 x 9.0 x 7.0	17.0 x 9.5 x 7.0	18.0 x 12.5 x 7.5
Required Total Operating Space	20.5 x 11.5 x 5.0	21.0 x 11.5 x 5.0	22.0 x 11.8 x 5.5	22.5 x 11.8 x 7.0	22.5 x 12.0 x 7.0	20.0 x 12.5 x 7.0	21.0 x 15.5 x 7.5
Input							
Hours per Feed*	2 - 3	2-3	2 - 3	2 - 3	2 - 3	2 - 3	2 - 3
Kilograms per Feed	413 - 625	925 - 1,250	1,650 - 2,500	3,300 - 5,000	5,950 - 7,500	7,600 - 10,000	9,250 - 12,500
Loading	Auto / Manual	Auto / Annual					
Hopper Door Control	By PLC						
Output**	,	í í	, í	, í	, í	, í	, í
Eco Friendly Ash (Kgs / 24 hours)	250	500	1,000	2,000	3,000	4,000	5,000
Maximum Green Power	60	120	220	400	620	850	1,200
Generated							
(kW / Hour)							
Bio Sludge (Kgs / 24 Hours)	Negligible						
Secondary Devices (kw / hour)							
3 Wet Scrubbers (5 HP)	4.5	4.5	4.5	4.5	4.5	4.5	4.5
PLC Control Panel	Negligible						
Hopper Door (2 HP)	1.5	1.5	1.5	1.5	1.5	4.5	4.5
Conveyor Belt (2 HP)	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Ash Conveyor (2 HP)	2.25	2.25	2.25	2.25	2.25	2.25	2.25
Blower + 3 water Pumps (10 P)	3.75	3.75	3.75	5.6	5.6	7.45	7.45
Water Consumption (Liters / 3 Months)							
3 Water Tanks (1.5 M3 / Tank)	4,500	4,500	4,500	4,500	4,500	4,500	4,500

Please Note - ** to generate Electricity, we will to add the ORC to Electricity Add-On Module

TECHNICAL SPECIFICATIONS OF THE "Plastics to Oil" SOLUTIONS -

	MODEL	MODEL	MODEL	MODEL	MODEL	MODEL	MODEL
	RC5	RC10	RC20	RC40	RC60	RC80	RC100
Capacity (Ton / 24 hrs)	5	10	20	40	60	80	100
Output							
Pyrolysis Oil (LiterPD)	2,500	5,000	10,000	20,000	30,000	40,000	50,000
Sync Gas (TPD)	1,000	2,000	4,000	8,000	12,000	16,000	20,000
Carbon Black (TPD)	1,500	3,000	6,000	12,000	18,000	24,000	30,000

TECHNICAL SPECIFICATIONS OF THE "ORC to Electricity" SOLUTIONS -

	MODEL PP5	MODEL PP10	MODEL PP20	MODEL PP40	MODEL PP60	MODEL PP80	MODEL PP100
Capacity (Ton / 24 hrs)	5	10	20	40	60	80	100
Output							
Maximum Green Power	60	120	220	400	620	850	1,200
Generated							
(kW / Hour)							
Voltage / Ph / Hz	415 / 3/ 50	415 / 3/ 50	415 / 3/ 50	415 / 3/ 50	415 / 3/ 50	415 / 3/ 50	415 / 3/ 50

CERTIFICATES

This is a Certificate of the Testing Results of the Output produced by a machine used in Singapore conducted by a Laboratory in Singapore.



ASH & SLUDGE COMPLIANCE

ASH 1 - DOMESTIC WASTE, SAMPLING DATE: 01 OCTOBER 2019 ASH 2 - DOMESTIC WASTE W/TYRES, SAMPLING DATE: 02 OCTOBER 2019 SLUDGE, SAMPLING DATE: 03 OCTOBER 2019



Test	Method	Result			Philippines	Singapore	
		Ash 1	Ash 2	Sludge	Standard	Standard	Standard
Arsenic (as Total As), mg/L	EPA 1311/ICP- OES	<0.10	<0.10	<0.10	5	5	5
Barium (as Total Ba), mg/L	EPA 1311/ICP- OES	0.41	1.12	<0.10	100	100	100
Cadmium (as Total Cd), mg/L	EPA 1311/ICP- OES	<0.01	<0.01	<0.01	5	1	1
Chromium (as Total Cr), mg/L	EPA 1311/ICP- OES	0.15	0.04	<0.01	5	5	5
Lead (as Total Pb), mg/L	EPA 1311/ICP- OES	<0.10	<0.10	<0.10	5	5	5
Mercury (as Total Hg), mg/L	EPA 1311/VGA- ICPOES	<0.01	<0.01	<0.01	0.2	0.2	0.2
Selenium (as Total Se), mg/L	EPA 1311/ICP- OES	<0.10	<0.10	<0.10	1	1	1
Silver (as Total Ag), mg/L	EPA 1311/ICP- OES	<0.10	<0.10	<0.10	-	5	5

Remarks:

rks: 1.) The above results were tested based on sample submitted with reference to National Environmental Agency (NEA) Recommended Acceptance Criteria for Suitability of Industrial Wastes for Landfill Disposal as stipulated by Public Utilities Board (PUB) and DENR Standards for Wastes with Inorganic Chemicals under DAO 2004-36 Standards.

2.) Singapore standards follow those of USEPA



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Analytes	USEPA Standards	Determined v	alues WASTEGONE/EW	MS October 2019	Corrected values with O2 factor 0.55 WASTEGONE/EWMS October 2019			
		Municipal Waste	Municipal Waste	Municipal Waste + Tyres	Municipal Waste	Municipal Waste	Municipal Waste + Tyres	
ALC: NOT THE OWNER		Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	
Particulates	25 mg/Nm ³	0.8 mg/Nm ³	3.9 mg/Nm ³	3.1 mg/Nm ³	0.4 mg/Nm ³	2.1 mg/Nm ³	1.7 mg/Nm ³	
NOX	200 mg/Nm ³	58.0 mg/Nm ³	74.0 mg/Nm ³	173.0 mg/Nm ³	31.9 mg/Nm ³	40.7 mg/Nm ³	95.1 mg/Nm ³	
co	80 mg/Nm ³	13.0 mg/Nm ³	20.0 mg/Nm ³	30.0 mg/Nm ³	7.2 mg/Nm ³	11.0 mg/Nm ³	16.5 mg/Nm ³	
SO2	100 mg/Nm ³	14.0 mg/Nm ³	16.0 mg/Nm ³	51.0 mg/Nm ³	7.7 mg/Nm ³	8.8 mg/Nm ³	28.0 mg/Nm ³	
			1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 - 1990 -			85.0 5		
Analytes	EU Standards	Determined v	alues WASTEGONE/EW	MS October 2019	Corrected values with C	2 factor 0.55 WASTEGO	NE/EWMS October 2019	
		Municipal Waste	Municipal Waste	Municipal Waste + Tyres	Municipal Waste	Municipal Waste	Municipal Waste + Tyres	
		Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	
Particulates	5 mg/Nm ³	0.8 mg/Nm ³	3.9 mg/Nm ³	3.1 mg/Nm ³	0.4 mg/Nm ³	2.1 mg/Nm ³	1.7 mg/Nm ³	
NOX	120 mg/Nm ³	58.0 mg/Nm ³	74.0 mg/Nm ³	173.0 mg/Nm ³	31.9 mg/Nm ³	40.7 mg/Nm ³	95.1 mg/Nm ³	
CO	50 mg/Nm ³	13.0 mg/Nm ³	20.0 mg/Nm ³	30.0 mg/Nm ³	7.2 mg/Nm ³	11.0 mg/Nm ³	16.5 mg/Nm ³	
502	30 mg/Nm ³	14.0 mg/Nm ³	16.0 mg/Nm ³	51.0 mg/Nm ³	7.7 mg/Nm ³	8.8 mc/Nm ³	28.0 mg/Nm ³	

Analytes	Philippines Act	Determined values WASTEGONE/EWMS October 2019			Corrected values with O	2 factor 0.55 WASTEGO	NE/EWMS October 2019
		Municipal Waste	Municipal Waste	Municipal Waste + Tyres	Municipal Waste	Municipal Waste	Municipal Waste + Tyres
9		Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C
Particulates	200 mg/Nm ³	0.8 mg/Nm ³	3.9 mg/Nm ³	3.1 mg/Nm ³	0.4 mg/Nm ³	2.1 mg/Nm ³	1.7 mg/Nm ³
NOX	500 mg/Nm ³	58.0 mg/Nm ³	74.0 mg/Nm ³	173.0 mg/Nm ³	31.9 mg/Nm ³	40.7 mg/Nm ³	95.1 mg/Nm ³
CO	500 mg/Nm ³	13.0 mg/Nm ³	20.0 mg/Nm ³	30.0 mg/Nm ³	7.2 mg/Nm ³	11.0 mg/Nm ³	16.5 mg/Nm ³
502	200 mg/Nm ³	14.0 mg/Nm ³	16.0 mg/Nm ³	51.0 mg/Nm ³	7.7 mg/Nm ³	8.8 mg/Nm ³	28.0 mg/Nm ³

Analytes	Singapore Standards	Determined v	alues WASTEGONE/EW	MS October 2019	Corrected values with C	2 factor 0.55 WASTEGO	NE/EWMS October 2019
		Municipal Waste	Municipal Waste	Municipal Waste + Tyres	Municipal Waste	Municipal Waste	Municipal Waste + Tyres
o	s	Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C	Test 1 at 500 deg C	Test 2 at 700 deg C	Test 3 at 900 deg C
Particulates	50 mg/Nm ³	0.8 mg/Nm ³	3.9 mg/Nm ³	3.1 mg/Nm ³	0.4 mg/Nm ³	2.1 mg/Nm ³	1.7 mg/Nm ³
NOX	400 mg/Nm ³	58.0 mg/Nm ³	74.0 mg/Nm ³	173.0 mg/Nm ³	31.9 mg/Nm ³	40.7 mg/Nm ³	95.1 mg/Nm ³
CO	100 mg/Nm ³	13.0 mg/Nm ³	20.0 mg/Nm ³	30.0 mg/Nm ³	7.2 mg/Nm ³	11.0 mg/Nm ³	16.5 mg/Nm ³
502	200 mg/Nm ³	14.0 mg/Nm ³	16.0 mg/Nm ³	51.0 mg/Nm ³	7.7 mg/Nm ³	8.8 mg/Nm ³	28.0 mg/Nm ³

Remark: filtering system existing of only 1 wet scrubber





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Analytes	USEPA Standards	Determined values WASTEGONE/EWMS February 2020			Corrected values with O2 factor 0.55 WASTEGONE/EWMS February 2020		
		Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres	Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres
		Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C	Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C
Particulates	25 mg/Nm ³	16.2 mg/Nm ³	4.2 mg/Nm ³	3.7 mg/Nm ³	8.9 mg/Nm ³	2.3 mg/Nm ³	2,0 mg/Nm ²
NOX	200 mg/Nm ³	2.8 mg/Nm ³	9.7 mg/Nm ³	4.7 mg/Nm ³	1.5 mg/Nm ³	5.3 mg/Nm ³	2.6 mg/Nm
C0	80 mg/Nm ³	55.9 mg/Nm ³	7.4 mg/Nm ³	111.4 mg/Nm ³	30.7 mg/Nm ³	4.0 mg/Nm ³	61.3 mg/Nm
502	100 mg/Nm ³	2.6 mg/Nm ³	10.8 mg/Nm ³	28.1 mg/Nm ³	1.4 mg/Nm ³	5.9 mg/Nm ³	15.5 mg/Nm

Analytes	EU Standards	Determined	values WASTEGONE/EW	/MS February 2020	Corrected values wit	h O2 factor 0.55 WASTEG	ONE/EWMS February 2020
10 - 100 - 101		Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres	Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres
		Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C	Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C
Particulates	5 mg/Nm ³	16.2 mg/Nm ³	4.2 mg/Nm ³	3.7 mg/Nm ³	8.9 mg/Nm ³	2.3 mg/Nm ³	2,0 mg/Nm ³
NOX	120 mg/Nm ³	2.8 mg/Nm ³	9.7 mg/Nm ³	4.7 mg/Nm ³	1.5 mg/Nm ³	5.3 mg/Nm ³	2.6 mg/Nm ³
C0	50 mg/Nm ³	55.9 mg/Nm ³	7.4 mg/Nm ³	111.4 mg/Nm ³	30.7 mg/Nm ³	4.0 mg/Nm ³	61.3 mg/Nm ³
502	30 mg/Nm ³	2.6 mg/Nm ³	10.8 mg/Nm ³	28.1 mg/Nm ³	1.4 mg/Nm ³	5.9 mg/Nm ³	15.5 mg/Nm ³

Analytes	Philippines Act	Determined	values WASTEGONE/EW	/MS February 2020	Corrected values with O2 factor 0.55 WASTEGONE/EWMS February 2020			
2011-01 33		Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres	Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres	
		Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C	Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C	
Particulates	200 mg/Nm ³	16.2 mg/Nm ³	4.2 mg/Nm ³	3.7 mg/Nm ³	8.9 mg/Nm ³	2.3 mg/Nm ³	2,0 mg/Nm ³	
NOX	500 mg/Nm ³	2.8 mg/Nm ³	9.7 mg/Nm ³	4.7 mg/Nm ³	1.5 mg/Nm ³	5.3 mg/Nm ³	2.6 mg/Nm	
co	500 mg/Nm ³	55.9 mg/Nm ³	7.4 mg/Nm ³	111.4 mg/Nm ³	30.7 mg/Nm ³	4.0 mg/Nm ³	61.3 mg/Nm	
502	200 mg/Nm ³	2.6 me/Nm ³	10.8 mr/Nm ³	28.1 mr/Nm ³	14 mg/Nm ³	5.9 mc/Nm ³	15.5 mg/Nm ³	

Analytes	Singapore Standards	Determined values WASTEGONE/EWMS February 2020			Corrected values with O2 factor 0.55 WASTEGONE/EWMS February 2020		
		Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres	Municipal Waste	MSW+Papers+Plastics	MSW+Paper+Plastic+Tyres
100 C		Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C	Test 1 at 1100 deg C	Test 2 at 1100 deg C	Test 3 at 1100 deg C
Particulates	50 mg/Nm ³	16.2 mg/Nm ³	4.2 mg/Nm ³	3.7 mg/Nm ³	8.9 mg/Nm ³	2.3 mg/Nm ³	2,0 mg/Nm ³
NOX	400 mg/Nm ³	2.8 mg/Nm ³	9.7 mg/Nm ³	4.7 mg/Nm ³	1.5 mg/Nm ³	5.3 mg/Nm ³	2.6 mg/Nm ³
C0	100 mg/Nm ³	55.9 mg/Nm ³	7.4 mg/Nm ³	111.4 mg/Nm ³	30.7 mg/Nm ³	4.0 mg/Nm ³	61.3 mg/Nm ³
502	200 mg/Nm ³	2.6 mg/Nm ³	10.8 mg/Nm ³	28.1 mg/Nm ³	1.4 mg/Nm ³	5.9 mg/Nm ³	15.5 mg/Nm ³

Remark: filtering system existing of a 3-stage Scrubber System ie. 1st stage alkaline scrubber, 2nd stage acid scrubber and 3rd stage activated carbon system

Watch the Video Overview



Book a ZOOM Conference Call.

R's Nicholus

Nicholas Ashton President, Energeo (RFusion LLC)



Energeo is all about ecological sustainability; if we can contribute to saving the planet and humanity, we are all for it. We are on a mission, and thinking of better solutions is the first step.

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