GW2E, Inc.

Proven and Practical Solution to Convert Solid Waste Into Clean Energy www.gw2energy.com



GW2E Mission

Develop safe, proven, cost effective, environmentally friendly, and sustainable waste management solutions in order to minimize the need for landfills and incinerators through integrity, quality craftsmanship, and excellence in environmental management throughout Africa.

Solutions include collection, recycling, production of energy, and other high quality end products.



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Green Environmental Solutions for Africa Problem Solving Before It Happens

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GW2E has ongoing relationships and strategic partnerships with several African countries, including Ghana, Angola, Sierra Leone, Cape Verde and Liberia.

GW2E has team of proven developers, engineers, and manufacturers of Waste-to-Energy Systems to bring a permanent solution to the management of waste and the creation of renewable energy.

Lead Developer – 11 WTE facilities worldwide

Lead Engineers – 700 engineers – (waste mmt)

Manufacturer – 45 Year track Record



(systems in operation for 25 years -93% ncy)

TRADITIONAL DISPOSAL OF WASTE IN LANDFILLS AND INCINERATORS

The Problem

Destruction of the Environment, Pollution of Natural Resources and Creation of Health Issues

The Solution

Collect, Recycle and Convert Municipal Solid Waste (MSW) into Clean Energy



THE REAL TRUTH ABOUT LAND FILLING MUNICIPAL WASTE



A Major Environmental Problem that contaminates underground water reserves, soil, and air

- Overall danger to Public health
- Source of deadly bacteria,
- Source of carcenigens, and
- Source of deadly diseases including



- Meningitis
- plague
- •Production of Methane Gas





TYPES OF WASTE PROCESSED

Municipal Solid Waste Industrial Waste Standard & Industrial Tires Medical Waste Organic Waste



THE BENEFITS

- Scalable/Expandable to meet increases of waste generated by the increasing population and industrial growth.
- Gasification system that meets or exceeds US and Canadian environmental protection regulations.
- * Address and **minimize public health issues** from waste.
- Better use of land for economic development -Minimize Need for Landfills
- Capable of generating electricity, thus saving fossil fuel reserves.



Cost effective, funding itself on the basis of "sale power", recyclable & energy/carbon credits.

THE ALTERNATIVE TO LAND FILLING MUNICIPAL SOLID WASTE

- Modular, scalable, reliable baseload power plant that uses MSW as its fuel source
- Each Facility can process and combust 150 to 250 tons of waste per day
- Standard, "off-the-shelf" components are proven performers.
- Facilities are "modular" in nature such that components are "bolt-together" where there is little to no fabrication on site
- Facilities are "scalable" to meet the larger MSW volumes Plants can be installed in multiple locations or they can be located on one site . (e.g., 800 tons per day requirement = 4 units)
- Facilities operate up to 93% of the time, comparable to other types of baseload power plants.



GENERAL OPERATING SPECIFICATIONS FOR SINGLE PLANT

- Operational 24/7/340 days per year.
- Commercially successful in processing MSW, such that less than 10% ever reaches a landfill, while up to 30% is recycled
- Up to 10 MW/h power production per plant (250 tons per day).
- The plant can process organic waste up to 60% humidity.
- Minimum maintenance requirements.
- Designed to avoid production of toxins, dioxins, and furans
- Designed to operate within all applicable environmental standards



REDUCE GREEN HOUSE GAS (GHG) EMISSIONS

- EPA analysis also shows that Waste-to-Energy yields the Best Results (compared to landfills) in terms of maximum energy recovery and lowest GHG and criteria pollutant Emissions.
- Waste-to-Energy reduces GHG emissions by 0.5-1.3 tons of CO² equivalents per ton of MSW.
- The Intergovernmental Panel on Climate Change (IPCC), a leading forum of independent scientific experts on climate change, emphasizes Waste-to-Energy's dual benefits of:
- (i) offsetting fossil fuel combustion and
 - (ii) avoided landfill methane emissions.
- The Kyoto Protocol's Clean Development Mechanism **approves Waste-to-Energy as a source of <u>tradable GHG emission reduction</u> <u>credits that displaces electricity</u> from fossil fuels and avoids landfill methane emissions from waste.**



GW2E - GHANA

- * Nine Years History in Ghana.
- Development, Engineering and Manufacturing Teams in place (US based).
 - * Create Jobs in US and Ghana.....
- Executed 25 Year Waste Delivery Agreement
 - * Build, Own, and Operate
 - * Exclusive basis for eighteen (18) months
- Preparing licensing application to receive
- Power Purchasing Agreement.
- Seeking Investors.

