



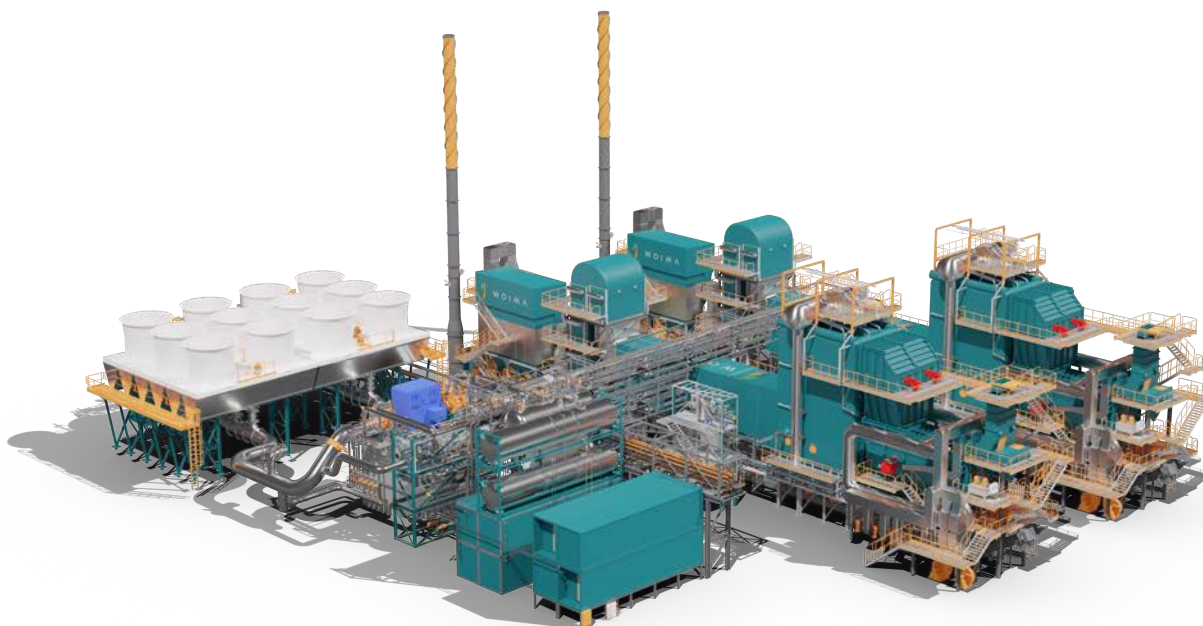
W O I M A

CORPORATION

## USE CASE



WASTE REDUCTION  
AS A SERVICE



## WASTE REDUCTION AS A SERVICE (WRaaS)

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The world is drowning in waste. This is especially true in urban areas that are growing faster than waste management can keep up. Landfills and dumpsites are overflowing, streets and gutters are filling with waste, and the city-dwellers are suffering the ill effects of waste-related odors and diseases. A modern *wasteWOIMA*® waste-to-energy power plant can simultaneously reduce the waste quantity by over 95% and generate enough energy to finance the waste management activities. And it will not affect the municipality's fiscal budget, since the solution is delivered as a Service, not as an investment.

Globally some three billion tons of municipal solid waste (MSW) is being generated every year, and that is expected to double by 2035. There are already over 100 cities each generating more than one million tons per year, and over 50% of them are in the developing world. Similarly, there are over 100 landfills or dumpsites each occupying over 20 ha, holding more than 2.5 million tons of waste, and affecting the lives of over 100 million people directly. Again, most of these are located in the developing world.

Concentrated waste on landfills is especially hazardous due to biowaste luring pests, leachate water leaking into groundwater, and landfill gases forming noxious compounds and sometimes igniting or even exploding. And many of these landfills are still located in the city centers hindering urban development and causing unnecessary traffic congestion.

Waste Reduction as a Service (WRaaS) is a novel concept, where an investor Builds, Owns and Operates (BOO) the *wasteWOIMA*® power plant for a period of time, typically 5 to 15 years, in order to relieve the municipality's waste challenges. During this period, the plant can incinerate either newly collected or already landfilled waste to energy, or both. This buys the municipality time to develop their own waste management processes and practices to tackle the challenge themselves.

The plant utilizes up to 200,000 tons of waste for fuel annually. Thus, even a large landfill can be emptied within ten years, after which the modular plant can be relocated to the next site. Combining WRaaS with our decentralized waste management and power generation model will yield significant waste logistics savings to the municipality; all without a penny of their own money.

The *wasteWOIMA*® plant uses non-toxic municipal, institutional, commercial and/or industrial waste to produce super-heated steam, electricity, thermal energy and/or potable water. The required waste quantity is roughly 170 tons per day, which translates to 3.7 MW<sub>e</sub> of electrical power or 2.4 MW<sub>e</sub> / 10 MW<sub>th</sub> in heating or 2.4 MW<sub>e</sub> / 6 MW<sub>th</sub> in cooling in co-generation. The plant is easily delivered, quick to install, cost-efficient to run and simple to maintain offering all stakeholders significant benefits.

## BENEFITS:

### WASTE MANAGEMENT

- Creating new business potential
- Simplifying waste logistics
- Reducing environmental impacts
- Matching future regulations
- Postponing landfill investments
- Green image benefits

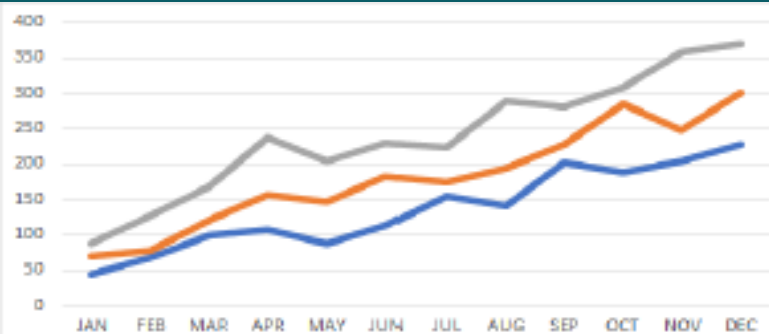


### POWER & UTILITY

- Decentralizing power generation
- Enabling off-grid solutions
- Offering fuel & production flexibility
- Harnessing endless fuel source
- Utilizing carbon credit schemes
- Fast plant delivery

### INVESTORS

- Excellent return on investment (ROI)
- Scalable business model
- Diversified investment portfolio
- Vendor arranged funding
- Fast project roll-out
- Plant relocation option



### OTHER STAKEHOLDERS

- Turning waste into local welfare
- Health & environmental benefits
- Local reliable energy supply
- Educational & job opportunities
- Improving living conditions
- Implementing development funding



WOIMA

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#### YOUR LOCAL CONNECTION

