

# UCY business services & trading (Pty) Ltd.

South African Division of UCY Group International

# Waste Management for a clean South Africa!

# **Recycling and Waste Management with High Temperature Conversion of Waste**

In today's world over 1.5 million children die through polluted water and 45% of the population of Africa have no clean water.

The ever increasing demand for more electricity is causing the price not only of electricity to rise dramatically but also the price for Fuel and Gas.

Economical growth can only be achieved where there is sufficient power to provide industries requirements.

Looking into the future; the need for alternative energy / fuel systems are becoming more and more important.

The existing system of Waste to Energy through incineration has proven to cause many problems for the environment.

Using a module system the High Temperature Conversation of Waste, HTCW<sup>®</sup> provides decentralised units to fit the needs of the specific area. One ton of waste material will produce approx. 337.5 m<sup>3</sup> of drinking water

One ton of waste material can produce approx. 1.63 MWh of electricity helping to keep electricity prices lower

HTCW<sup>®</sup> plants can be self sufficient and still supply energy for industry

One ton of waste material will produce approx. 380 litres of Diesel

Residue from Incinerators can be recycled using the HTCW<sup>®</sup> Technology. Reducing the number of hazardous landfill sites required

The fewer kilometres driven by large waste transportation vehicles reduces the amount of  $CO_2$  released into the atmosphere

### Health Concerns in the waste industry today:

#### Infection

- > contact with human fecal matter, blood, and diseased tissue
- > contact with diseased dead animal matter and manure

#### **Animal diseases**

- foraging of animals / birds at open dumps
- > recycling of slaughter waste into animal feed

#### **Respiratory disease**

> particulates and bio aerosols reduce pulmonary function

#### Cancer

- > volatilised refractory organics from landfill gases
- > heavy metals, dioxins and furans from poorly controlled burning

#### **Headaches**

> lack of oxygen and excessive CO from dumpsite decomposition and burning

## Injury

> wounds from sharps

With the High Temperature Conversation of Waste  ${\rm HTCW}^{\rm (8)}$  NO pre-sorting / closed loop system all of the above concerns are eliminated



Let children smile and give Africa a good and healthy future!