

ZERI WASTE TO ENERGY CDM PROJECT IN THE CITY OF LILONGWE

A Green Energy Project to Save our Cities

"THE WONDERS OF NATURE"

By Zero Emission Resource Initiatives
(ZERI)

Presented by Robert Kawiya



There is no limit to initiatives. Choices
unlimited

1. Project Benefits

Environmental benefits

- a. Extends the life of landfills as organic waste which makes 80% of waste is used in compost making resulting in less wastes going to landfill;
- b. Generation of green electricity thereby promoting low carbon development;
- c. Less wastes will be going to landfill resulting in less pressure to secure new landfill sites;
- c. Restores food and water safety as it eliminates pathogens from waste and making the air cleaner;

- d. Less nutrient run off, reduction in soil erosion because compost will be used by smallholder farmers in their gardens. Compost absorbs more water than soils low in organic matter;
- e. Organic liquid fertilizer and compost available to farmers at affordable price thereby improving soil fertility and crop yields;
- f. As a tool in reducing chemical pollution from entering water aquifers;

Socio economic benefits

a. The project will directly and indirectly create employment to more than 300 people. This will directly benefit mostly poor women who will be engaged in sorting the waste at the factory and will contribute to their economic empowerment;

b. Foreign direct investment and capital inflows will ensue from international banks and investors. Local banks will also mobilize finances to contribute towards the project;

- c. By using less chemical nitrogen, the country will be saving on foreign exchange. Less nitrogen will be bought to fortify the compost so that our nutrient deficient soils can become productive again while healing the soil to retain more moisture and reduce soil erosion while increasing crop productivity;
- d. Technology transfer and capacity building among local professionals in waste management through professional and on the job trainings.

e. By positioning the plant close to Kanengo industrial site, there will be no more power outage which will improve productivity at the factories and save lives at adjacent hospitals.



Clean environment will yield natures bounty



Nature can give you such goodies

Global benefits

a. Reduced emission of methane as methane rich biogas produced from waste digestion is used to generate green electricity.

b. Waste heat from the turbines is used to dry sludge which is avoiding use of fossil fuel and biomass;

PROJECT FINANCE

CDM Loan scheme;

Equity Finance;

Loan Finance;

Government Finance(bonds);

Multilateral grants;

Bilateral grants.

CHALLENGES

Transaction costs are not attractive to find finance easily;
CDM loan scheme not easily accessed;
Finance for project activities available upon fulfilling certain requirements.

NEXT STEPS

Identifying project partners;

Identifying affordable financing mechanisms;

Update data collection for baselines;

Make project attractive to stakeholders;

Meetings with stakeholders;



THANK YOU FOR YOUR ATTENTION