MUSTAPHA ENERGY: CONVERTING RESIDUAL WASTE IN CAPE TOWN

This project will assess the feasibility of a modular waste-to-energy plant in the Athlone industrial area of Cape Town. The proposed plant would generate 2.7 MW of electricity and thermal energy from municipal solid waste, using an innovative technology developed by a Finnish company. The facility will be designed to apply an integrated approach to electricity and thermal energy for municipalities and industrial off-takers. The project will also consider gasification as a comparative or supplemental technology. Witech also plans to establish a local non-profit to educate schoolchildren and the community about waste management. EEP Africa financing will support the research and studies needed to develop a bankable project.

Outcome and Impact

This would be the first plant in South Africa to use moving grate incineration technology to turn municipal solid waste into energy. When operational, the plant will divert more than 60,000 tonnes of waste from Cape Town landfills, significantly reducing GHG emissions. The project has the potential to transform waste management in South Africa and provide clean energy to industrial clients and the grid, reducing the need for load shedding.