

Developing the Largest Waste to Energy Plant in India

Under the "Clean India Mission", the Ministry of Urban Development (MoUD) of India is investing US\$ 9 Billion to clean up 75 largest cities in India. Waste to Energy (WTE) plants will be a key to its implementation. A new state-of-the-art WTE plant in New Delhi is planned for this purpose to set an example for other cities to follow.

Delhi generates 8,400 tons per day (TPD) of Municipal Solid Waste (MSW), which is expected to double in the next 15 years. The current capacity of waste processing plants in Delhi is only 8,000 TPD. It is estimated that by the year 2050, Delhi would require 100 km² of landfill area, which is 7% of the total land area of the capital for waste disposal unless a new WTE plant is commissioned. The existing landfill sites in Delhi have dangerously exceeded their capacity already.

WTE projects have been running successfully in many countries but have produced only mixed results in India and have often been plagued with controversies. This is due to various technical, financial, environmental, political and social factors involved.

Hallam Energy at Sheffield Hallam University was commissioned by the Government of India, to conduct a detailed independent investigation into the techno-economic feasibility of such a WTE project in Delhi.

The goals of this study were (i) to make an informed decision on whether the proposed WTE facility for Delhi will be technically and financially viable, and (ii) to gain a reasonable understanding of the costs and resources involved in this investment. This work looks at the various challenges associated in setting up WTE plants in developing countries.