

# **Carbon footprint evaluation of municipal solid waste**

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Greenhouse gas emission from municipal solid waste is one of the major sources of anthropogenic climate change. This paper estimates the emissions from the municipal solid waste, both in state wide as well city wide. Fifty nine major cities across India were chosen based on the data availability from the Central Pollution Control Board. Detailed waste composition and generation data were well illustrated. IPCC default mythology was used to estimate the emissions from the waste generated. All the cities were grouped in six zones. Emissions from cities of each zone were compared with each other. Important findings were as follows 1) Metro cities such as Mumbai, Delhi, Hyderabad, Bangalore and Chennai where the highest GHG emitters from the Municipal solid waste. Their emissions were in the ranges from 631.5 Gg to 1148 Gg of CO<sub>2</sub>eq. 2) Trends of emissions were also studied for all the states and important cities for the period of 10 years and 5 years respectively. 3) At the end of 2010, States like Maharashtra, West Bengal and Tamil Nadu were the top three GHG emitters from urban municipal solid waste of India.