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WASTE MANAGEMENT IN INDIA

Mapping Opportunities vis-à-vis Stakeholder

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The growing economic growth coupled with increasing industrialization, urbanization and changes in life style has moved India toward circular economy. This growth of economy is reciprocal outcome of rise of per capita consumption, which result in ~62 million tonnes (Mt) of annual solid waste generation. Out of which only 43 Mt is collected, 12 Mt treated and the rest are dumped. The remaining ~50 Mt of untreated waste still lies as opportunity for circular economy, though not tapped yet, has raise the risk of environment degradation and health concern, becoming major challenge for the society as a whole.

In milieu of this it is pertinent to note that the rise in economic growth expected to increase the waste generation to 165 Mt by 2030. This will increase the problem of dumping which is even now overflowing making it very difficult to manage by Municipalities. In addition to above, waste management in India is fragmented and unorganized in nature and operated by small vendors. In absence of technical and operational expertise waste segregation is not done properly and makes it more difficult for municipalities to further manage the waste in an efficient and cost effective way. Small companies often struggle to sustain themselves in an isolated mode as modern recycling technology and financing is not easily available to them. But, if waste management activities are interlinked properly as one industry, it may bring much needed private participation and professionalism in the segment and the present scenario can be completely changed.

Government of India, has, time to time, issued the regulations and roadmaps for waste management. How The Environment Protection Act 1986, The Hazardous Wastes (Management, Handling and Trans boundary Movement) Rules 2008, The Plastics (Manufacture, Usage and Waste Management) Rules 2009, Bio-Medical Waste (Management and Handling) Rules 1998, The Batteries (Management and Handling) Rules, 2001, The E-Waste (Management and Handling Rules) 2010, and others with subsequent amendments are applicable in order to ensure sustainable development of economy. However, absence of a unified regulation for all activities and delays in clearances along with the lags in ground level implementation have limited the impact of above mentioned initiatives

Understanding the seriousness of the issue, Government of India has never stopped and has always came up with new missions such as Swachh Bharat Abhyan, Clean Ganga Mission and Nirmal Bharat Abhyan to mention few. Government of India has also opened gate for private player under Hybrid Annuity based public-private partnership (PPP) model for urban sewage management along with 100% foreign direct investment (FDI) under the automatic route for urban infrastructure, including waste management (subject to relevant rules and regulations) has been allowed.

In this regard it is quintessential to demystify the source of waste along with calorific value vis-à-vis state to untangle the logistics along with tune of opportunity for Waste to Energy (WTE) and Circular economy. In this regard we evolve with a dossier which entails the intricacies and nuances identified as the growth drivers and inhibitors to Waste Management in India. Identifying the major problems, tune of waste vis-à-vis sources, we delved deep to evolve with a trends, outlook and also evaluated opportunity for stakeholder. In reference to same we proudly announce the report on **“Waste Management in India: Mapping Opportunities vis-à-vis Stakeholder”**. The dossier would not only address to the demand of scrap material, biomass, e-waste, plastic waste, construction and demolition waste etc. but also the underlying opportunities as per each value chain i.e. Collection, Transportation, Processing and Recycling. It will not only benchmark the performance of company/states but also produce a path finding guide to improve return on investment by parametric competitor analysis.

The key queries which find answer in this report are: What would be the tune opportunity for circular economy? Is company/state performing well in term of waste management? Who would be strategic foreign investors for domestic waste management? How the calorific value of waste lies vis-à-vis states? Is technology apt for given calorific waste and how it is impacting environment? What is the size of Indian market vis-à-vis state with respect to waste sources and processing/recycling? Etc.

In this dossier we exhaustively examines the profiles of key players in waste management separately to generate a holistic track of competitiveness among the players. Through this report, we try to unveil the various constraint and driver for the Waste Management in India.

Queries like these and many more find their solutions in the virtue of this report which is to explore how the Municipal solid waste would respond domestically by 2025. The report provides highly reliable datasets and excellent insights on Waste generation/ processing opportunity and is a must buy for all allied stakeholders in the business value chain like financial institution, municipalities (local bodies, Industrial sector, entrepreneur, NGO's, logistics companies and investors etc.

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