

Standing Committee Report Summary

Power Generation from Municipal Solid Waste

- The Standing Committee on Energy (Chair: Dr. Kirit Somaiya) submitted a report on Power Generation from Municipal Solid Waste on August 5, 2016. Key observations and recommendations of the Committee include:
 - **Municipal solid waste:** About 1.43 lakh metric tonne of solid waste is generated every day in the country. 23% of this waste is treated and disposed. Note that, under the Swachh Bharat Mission (SBM), 100% scientific processing and disposal of municipal solid waste is envisaged by 2019. The Committee recommended that all urban local bodies should prepare action plans to establish waste treatment facilities. Further, segregation of waste should be made mandatory in all government offices, households, and commercial establishments. It also suggested that scientific treatment and disposal of municipal solid waste should be made compulsory under SBM.
 - **Technology options:** Energy can be generated from waste in various ways such as: (i) biomethanation of wet biodegradable waste (produces biogas), (ii) combustion of fuel generated from the dry, high organic component of combustible wastes, and (iii) complete combustion (or mass burning) of solid waste. Most of these techniques require proper segregation of waste, and an efficient segregation mechanism is lacking. The Committee recommended that government should provide policy and technical support for converting waste to energy. Further, mass burning of municipal waste should be prohibited as it is detrimental to environment and a major source of health hazards.
 - **Role of urban local bodies (ULBs):** The Committee noted that issues with the waste to energy sector include (i) irregular and inadequate quantity of supply, (ii) non-payment of agreed fee, and (iii) non-marketability of waste processed projects, including power. Several steps have been initiated under SBM for managing municipal solid waste such as viability gap funding to states with ULBs. However, these have not been successful in incentivising cities for regular supply of garbage. The Committee recommended that grants to states and ULBs should be increased. Tax exemptions for equipment and machinery should be considered to encourage private participation in the sector
- The Committee also recommended that the process of garbage collection should be made more scientific and efficient. ULBs should also properly estimate the approximate quantity of municipal waste generated every day in order to ensure its supply to the waste energy plant in a definite manner. To maximise waste collection efficiency, state governments and ULBs should integrate ragpickers and kabadiwalas within the formal system.
- **Tariff:** The Central Electricity Regulatory Commission (CERC) has notified a tariff of Rs 7.9 per unit for power derived from waste. The Committee recommended that the practice of tariff determination by the CERC must be reviewed, by amending the Electricity Act, 2003. The tariff of electricity generated from all the waste to energy plants should be decided through competitive bidding.
- The Committee also recommended that big polluters such as restaurants, hotels, and other commercial establishments should be asked to develop scientific methods of segregation of waste and its disposal. Failure to do so should be penalised through a tax, cess, or fine. The Committee also noted that common people pay twice for the disposal of the same garbage: (i) first to the local bodies for collection of garbage from their home, and (ii) second as a higher rate of electricity to compensate the producer of electricity from waste. It recommended that some alternate mechanisms should be adopted so that common people are not compelled to pay twice.
- **Authorities:** The Committee observed that at the central level, several Ministries are involved in handling municipal solid waste. These include the Ministries of Urban Development, Environment, Forest and Climate Change, and New and Renewable Energy. It recommended that a Monitoring Committee, consisting of representatives from all the central ministries along with the representatives of the state governments and ULBs should be set up. This Committee would coordinate efforts at each level, and suggest methods and technologies to be adopted to make the waste-to-energy plants successful. The Committee may also have technical experts, financial analysts, representatives from private sector, etc.

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