Current Status

- Only about 18 per cent of the waste generated by Indian urban population is treated
- A growing number of landfills are coming up around megacities of India
- Indian megacities generate only 1/4th of per capita MSW as compared to developed countries
- Waste to energy (WtE) is being looked upon as the most viable option for waste treatment
- There has been an overall increasing trend in the grid-interactive as well as off-grid WtE capacity
- Grid-interactive WtE capacity added in 2017-18 exceeded the target for the year

Government Initiatives

- Battery-operated electric buses as the most suitable and feasible for the Indian scenario
- The government has been taking a number of initiatives to promote this segment
- A noteworthy step has been the launch of Swachh Bharat Mission
- This is complemented well by the Smart Cities Mission
- The government revised the Municipal Solid Waste rules in 2016
- Remunerative tariffs have been set by CERC
- WtE has been kept out of the purview of competitive bidding guidelines for renewables
- NITI Aayog is planning to set up a WtE authority, called Waste-to-Energy Corporation of India
- The CFA level for WtE is likely to be revised upwards

Business Models and Economic Viability

- WtE projects are awarded under the DBFOT model, with inappropriate scope of work
- Several projects are contracted with either nil tipping fees or royalty fees
- New business models are emerging with permutations of tipping fee, user charge and VGF
- In Nagpur, the revenue is being shared by the ULB and the discom
- Gurugram has a user fee and user charges to be collected by the developer, but no tipping fee
- Self-funded EPC by ULBs and third party-funded EPC model are some models that need testing

Outlook and the way forward

- The country is likely to face an insurmountable waste crisis
- Waste management will be on high priority with municipal authorities playing a key role
- However, these ULBs are under-resourced, underpowered and subject to political manipulations
- There is a need for skilled staff and appropriate technology
- Innovative and localised business models and technologies are needed for different cities
- A number of successful projects have already emerged
- The interest revival in WtE projects will change the size and scale of this segment in future
1. Executive Summary

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