



मुंबई  
CLIMATE ACTION PLAN



Stakeholder Consultations

# Solid Waste Management

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# Mumbai's Waste Profile

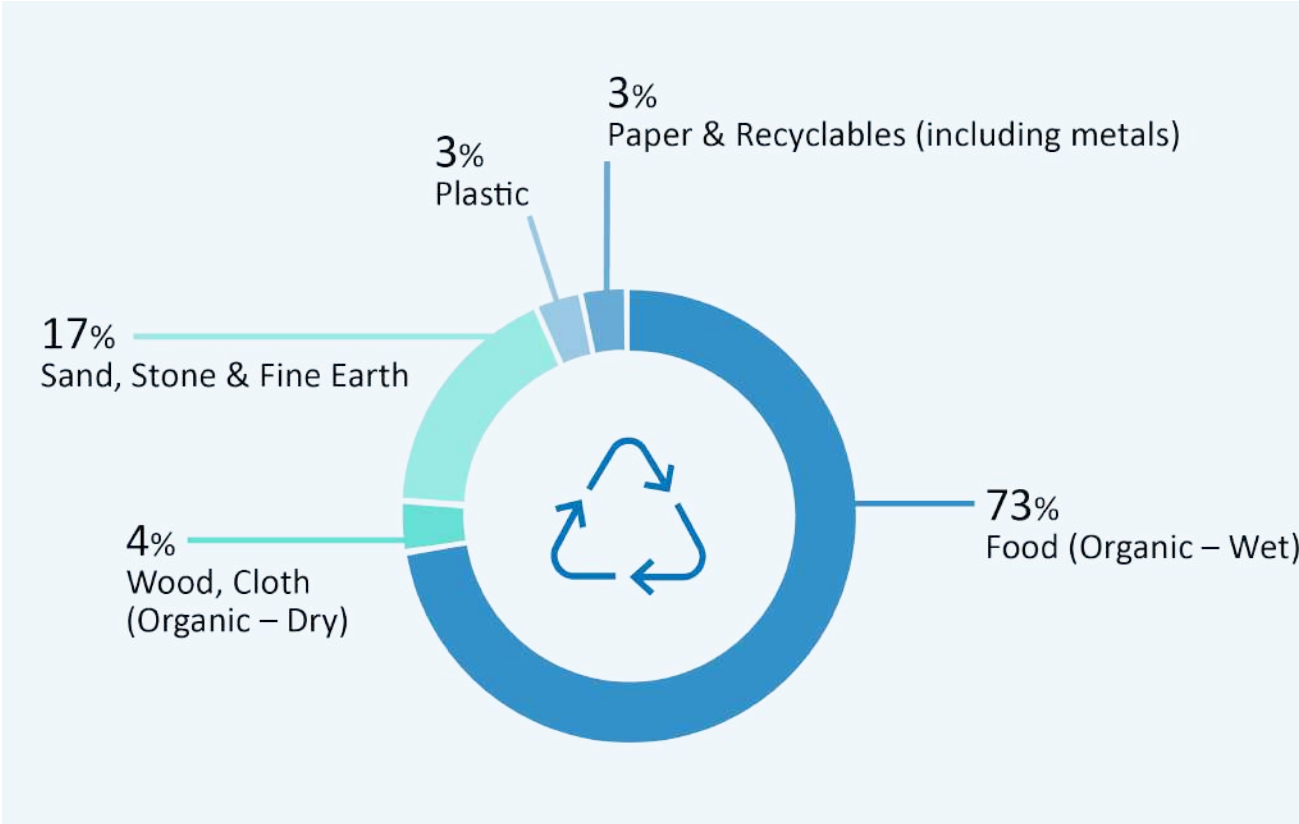
- **MSW Generation (2019): 6,800 TPD\***

73% of waste generated is organic wet waste.

- **Emissions from the waste sector (2019): 7%**

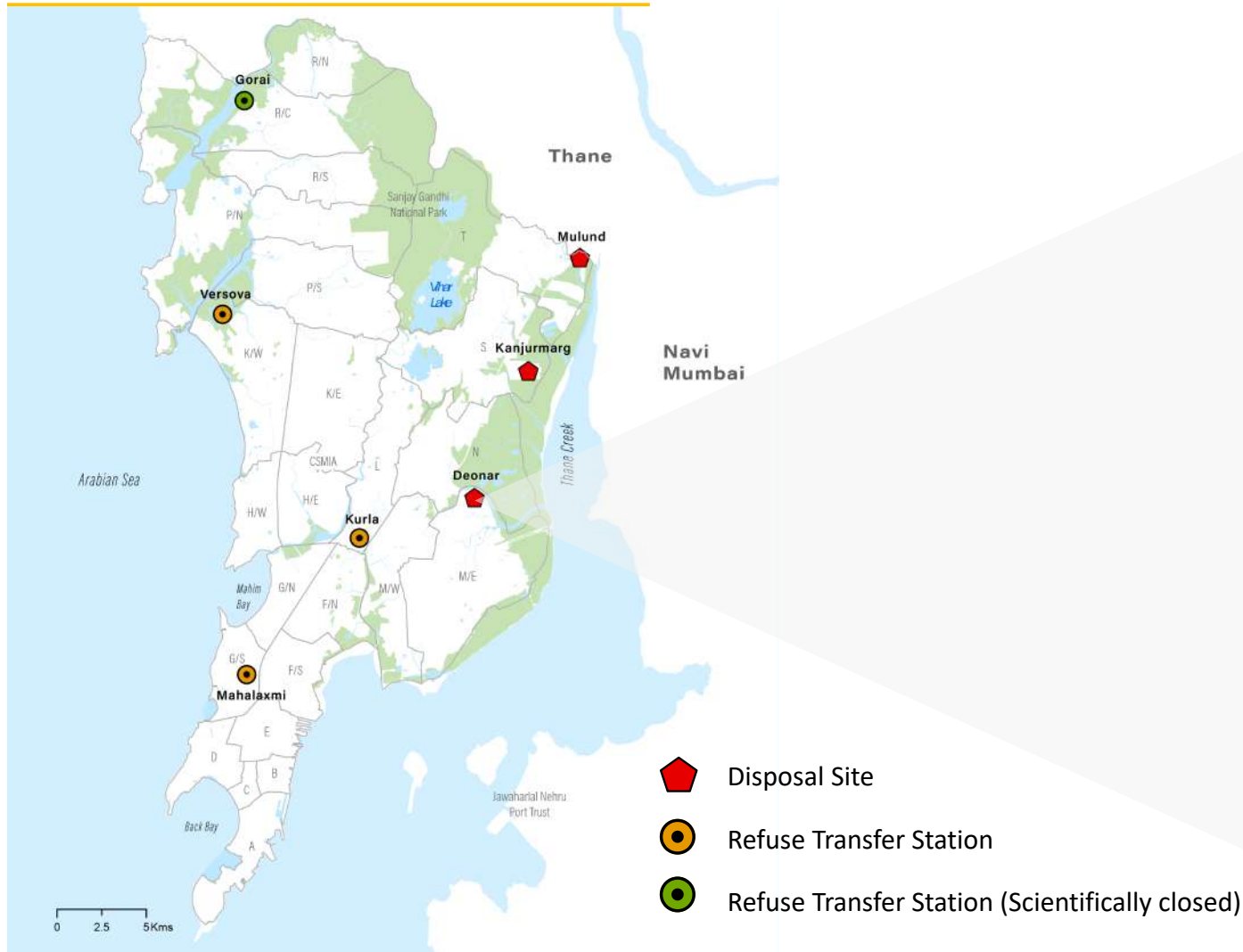
of Mumbai's total emissions

Mumbai's Waste Composition



\* Excludes waste managed by residential, commercial & institutional buildings and garden & tree authority  
Source: Environment Status Report 2020 & Swachh Survekshan 2020

# Waste Disposal Sites in the city



□ MCGM Ward Boundary    ■ Water Body    ■ Natural Feature

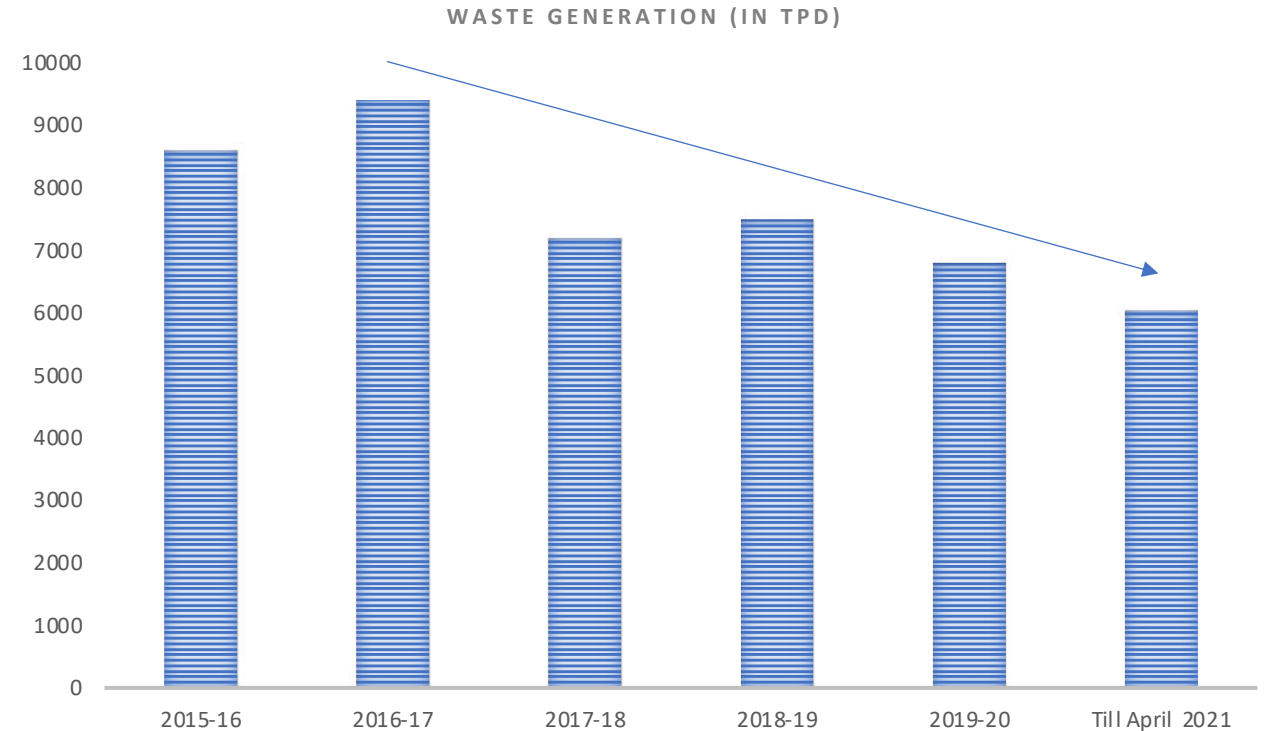
Source: Environment Status Report 2020

Image: <https://earthobservatory.nasa.gov/images/87429/fire-burns-in-mumbai-landfill>

# Decrease in Waste

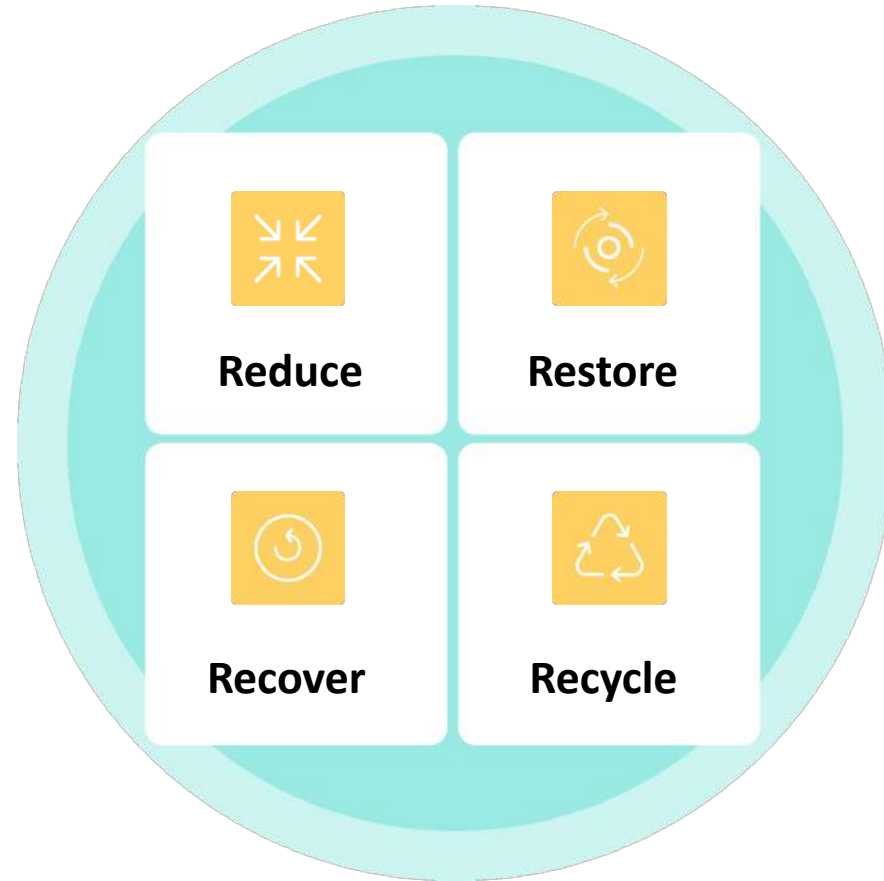
## Managed by MCGM

- Implementation of the **Solid Waste Management Rules** mandated in 2016
- MCGM mandate for all **bulk generators** of solid waste to provide in-situ treatment



# MCGM's Initiatives

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# MCGM's Initiatives

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## Reduce

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- 5-10% rebate on property tax for solid waste processing at source.
- 3,367 additional Bulk Waste Generators notified.
- 19 Organic Waste Converter machines proposed to be installed across markets.
- Solid waste management plan under its 'Vision 2030' initiative



## Restore

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- Dumpsite reclamation at Mulund: 1,14,200 MT of legacy waste processed.
- Development of Waste to Energy projects at Deonar.
- Swachh Mumbai Prabhodhan Abhiyan to enable waste management in slums.

# MCGM's Initiatives

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## Recover

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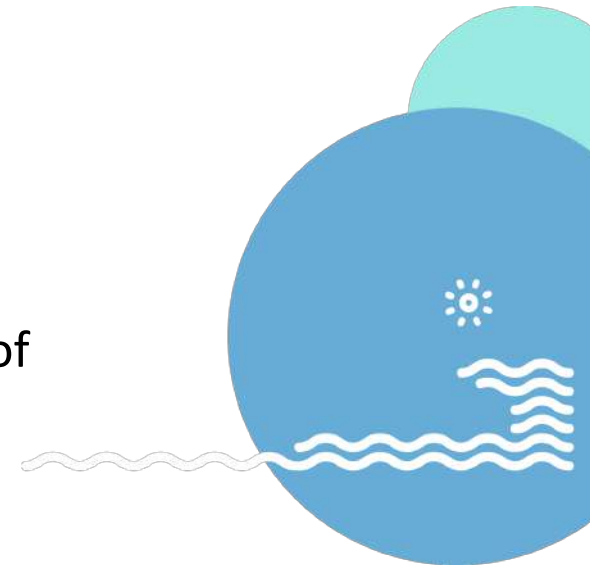
- Allotment of 85 ha of land to setup scientific waste processing facilities.
- 10 TPD of garden & tree waste processing into briquettes/pellets (green coal).



## Recycle

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- Handling & processing of 1200 TPD of C&D waste as per protocol.
- Setting up of 4 new dry waste sorting centres (DWSC) and appointment of waste pickers.





# Key Gaps



## Restore



## Reduce



## Recycle



### Planning & Policy

Strong mandate to restore the Deonar dumpsite

City-level integrated waste management plan focused on ward-level strategies

Framework for effective implementation of EPR



### Institutional Capacity

Availability of technology & suitable contractors

Uptake & awareness on segregation & composting at source at the unit-level

Community engagement & poor integration of informal ragpickers



### Investment

Financial support/resources to undertake scientific remediation

Financial support, space, equipment for composting to residential buildings, societies

High cost of setting up & maintaining recycling booths/vending machines at public places



### Information

Understanding the impact of unscientifically managed dumpsites on air quality & GHG emissions

Accurate data on total waste generated and fuel consumed to collect & transport waste

Awareness & information on ragpickers, community collection centers, recycling facilities etc.



# Sustainable Waste Management Hierarchy

Most Preferred

Reduce: Segregation at Source & Reuse

82% waste is segregated while the benchmark is 100%

Repair & Recycle

46 Dry Waste Sorting Centers functional across 24 wards

Composting (Recover)

1,696 Bulk Waste Generators have started composting

Waste to Energy (Recover)

35% of MSW is recovered while the benchmark is 80%

Landfill

1,676 trips per day to collect & transport waste

Most Value Generated

Least Preferred

Least Value Generated

# Strive To Make Mumbai A Zero-landfill City

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- **Decentralized waste management system**
  - City-level integrated waste management plan
  - Designated ward-level waste management cells
  - Integration of informal waste pickers as paid service providers

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- **Scientific disposal & waste management**
  - Segregation at source, recycling, composting
  - Framework to improve implementation of Extended Producer Responsibility
  - Remediation of legacy waste dumpsites

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- **Information (waste) dashboard**
  - Ward-level data on daily waste generated, segregated, recycled, composted, landfilled
  - VKTs/fuel consumption for collection & transportation
  - Location of community collection centres/composting sites and recycling booths/vending machines



Thank you —————