



MUNICIPAL SOLID WASTE INITIATIVE

SOLID WASTE EMISSIONS ESTIMATION TOOL (SWEET)

The municipal solid waste (MSW) sector is a significant source of short-lived climate pollutant (SLCP) emissions, especially methane and black carbon. The Climate and Clean Air Coalition Municipal Solid Waste Initiative (Waste Initiative) developed the Solid Waste Emissions Estimation Tool (SWEET) to assist stakeholders in estimating these emissions and comparing the emissions reduction benefits of different waste management scenarios. The tool can be used to inform MSW management decision-making and priority setting, and allows cities to benchmark and monitor their emissions over time.

EMISSIONS SOURCES

The tool assists users in determining a first-order estimate of emissions of methane and black carbon, and other co-emitted pollutants, including carbon dioxide, organic carbon, nitrogen oxides, and sulfur oxides. The tool quantifies emissions from the following sources:

- Open dumps and landfills (up to four per city)
- Waste collection and transportation
- Open burning
- Landfill gas collection systems
- Organic waste management projects (e.g., composting facilities)
- Waste handling equipment (e.g., bulldozers)
- Waste incineration facilities.

OUTPUTS

Emissions are presented in both metric tons and metric tons of carbon dioxide equivalent. Estimates are presented in tabular and graphic form for each individual source and for the sector as a whole.

Users can calculate emissions at a specific point in time (e.g., to establish a baseline), and can evaluate the emissions reduction benefits of alternative waste management scenarios such as diverting organic waste from dump sites and landfills.

ACCESSING SWEET

The tool is available to download from the Waste Initiative's Knowledge Platform: <http://www.waste.ccacoalition.org/tool>.

KEY FEATURES

- MS Excel-based
- Free and readily available
- Highly automated to reduce user burden
- Based on best-available data sources and methods
- Flexibility to use default values or input city-specific values

ABOUT THE COALITION

The Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (Coalition) is a voluntary global partnership of governments, intergovernmental organizations, business, scientific institutions and civil society committed to catalysing concrete, substantial action to reduce SLCPs (including methane, black carbon and many hydrofluorocarbons). The Coalition works through collaborative initiatives to raise awareness, mobilise resources, and lead transformative actions in key emitting sectors.

MORE INFORMATION

www.waste.ccacoalition.org
www.waste.ccacoalition.org/tool/

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**CLIMATE &
CLEAN AIR
COALITION**
TO REDUCE SHORT-LIVED
CLIMATE POLLUTANTS