

# ***SMART WASTE MANGEMENT SYSTEM FOR METROPOLITAN CITIES USING IOT***

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## **PROBLEM SOLUTION FIT**

According to the Environmental Protection Agency (EPA), roughly 75% of the waste stream in the United States is recyclable, but only about 30% of recyclable materials actually get recycled. Considering humans produce just over 2 billion tons of waste each year, that's a lot of unnecessary trash ending up in the world's landfills and waterways.

The world's trash problem isn't going away any time soon, and traditional waste management systems aren't equipped to deal with the extra trash produced by growing populations. To help bridge the gap, communities need to adopt smart waste management technologies that increase efficiency, lower collection costs and divert more trash away from landfills.

- Air emissions. Air emissions are mainly produced by fumes from the burning of waste and also landfill gases. ...
- Health impact. ...
- Ecosystem services in danger. ...
- Soil contamination. ...
- Surface and groundwater. ...
- Marine pollution. ...
- Odour and littering. ...
- Garbage level detection in bins.
- Getting the weight of the garbage in the bin.
- Alerts the authorized person to empty the bin whenever the bins are full.

- Garbage level of the bins can be monitored through a web App.
- We can view the location of every bin in the web application by sending GPS location from the device.

## SOLUTION ARCHITECTURE

