

Project Title	Authors	Objective
IOT Enabled Smart Waste Bin with Real Time Monitoring for efficient waste management in Metropolitan Cities	Manju Mohan,Kuppan Chetty Ramanathan	A waste management system by utilizing the concept of IoT to connect the different dust bins at different locations and also to identify the level of waste in a dust bin through a centralized system. Hence, the concerned persons will be notified about each bin status and there by achieving the removal of wastes in a proper way.
Solid Waste Collection as a Service using IoT Solution for Smart Cities	Sangita S. Chaudhari , Varsha Y. Bhole	There will be multiple garbage bins positioned throughout the city or campus, these garbage bins will be set up with low cost embedded device which helps in tracking the level of garbage in particular bin along with location tracking module to get real time location of bin. All the real time information including garbage level as well as location of that bin will be send frequently to concern authority and garbage collector truck driver as well. The truck driver will have android application which will show real time information about all bins to driver that which bin is how much full and which location in need to graphical form. So he can go directly to place where actually empty the garbage bin to achieve Resource optimization, cost reduction, time management and active participation of truck driver.
A Serverless IoT Architecture for Smart Waste Management Systems	Eyhab Al-Masri, Ibrahim Diabate, Richa Jain, Ming Hoi Lam and Swetha Reddy Nathala	recycle.io, a serverless Internet of Things (IoT) architecture for smart waste management systems. Using recycle.io, it is then possible to determine in real-time the types of source material violations prior to the waste collection. In this manner, waste management systems can identify sources of violations and rectify this by bringing awareness to the public or issuing fines to prevent violations from occurring.

IoT assisted Waste Collection and Management system using QR codes	Aparna H , Bhumijaa B , Avila J, Thenmozhi K , Rengarajan Amirtharaja and Padmapriya Praveenkumar	IoT and smart sensors can be used to manage waste efficiently. Quick Response (QR) codes are used to track and monitor the waste collection procedure. The QR codes are designed to be scanned via an android application, which verifies, stores data and alerts the user. QR codes are used as they are safe and can be printed on any surface and can be scanned easily using smartphones.
Smart City Implementation of Smart Bin Using Raspberry Pi	R.Chawngsangpuii	In this paper, a model of smart IOT-based dustbin using Raspberry Pi for handling sanitation issues related to garbage management system is presented. Since the government has taken many initiatives in developing Smart Cities in India, any Smart City Project will not be complete without having a Smart Garbage Management System. A smart system able to give real-time information about the status of the garbage bin is needed. This system should be able to alert the municipality for cleaning or picking the bin on time, thereby safeguarding the environment and also the health issues of the citizens. For implementing the system, message can be sent to the person authorized for the purpose to gather the garbage from the actual and precise location.