

PROBLEM STATEMENT:

Smart waste management is characterized by the usage of technology in order to be more efficient when it comes to managing waste. This makes it possible to plan more efficient routes for the trash collectors who empty the bins, but also lowers the chance of any bin being full for over a week. When placing garbage into the container, a sensor measures its capacity. Then the compactor compresses the waste and again takes a measurement. Finally, the smart bin sends a notification by mail or SMS when the container is ready to be emptied. Smart Bins help to create a cleaner, safer, more hygienic environment and enhanced operational efficiency while reducing management costs, resources, and road-side emissions. The Smart Bin is ideal for busy locations such as campuses, theme parks, airports, railway stations, and shopping malls. Waste management is an important element of environmental protection. Its purpose is to provide hygienic, efficient and economic solid waste storage, collection, transportation and treatment or disposal of waste without polluting the atmosphere, soil or water system. Poor waste management contributes to climate change and air pollution, and directly affects many ecosystems and species. Landfills, considered the last resort in the waste hierarchy, release methane, a very powerful greenhouse gas linked to climate change