While this approach works to a large extent, they don’t take into account the variations in the quantity of garbage. The collection team may waste their resources checking empty bins on one day and see the bins overflowing on another day.

Proper waste disposal

Once the waste is collected and separated, the next challenge is its disposal. Different types of waste have to be disposed off in a safe manner with the least environmental impact.

But most waste disposal methods often take a lot of energy and require a lot of resources to maintain. If the equipment is not properly maintained, it may break down causing a waste management crisis, or may even leak toxic chemicals into the environment.

Raising awareness about pollution from waste

Waste management should not be just about the collection and disposal of waste. There should be an attempt from all the parties to reduce the waste and be more mindful of what they’re throwing out.

Even cities with the most robust waste management systems struggle with this. How can IoT streamline waste management?

Here’s how the internet of things can make waste management more efficient and effective:

IoT solutions can automate more waste management processes

A combination of IoT sensors and AI vision can automate processes from waste collection to disposal.

For instance, many cities have deployed IoT-equipped smart bins that sent alerts when they’re full. These systems ensure that bins are not overflowing and make the waste collection process more energy efficient.

IoT can also reduce the manual processes in waste separation and actively monitor the disposal processes.

The Internet of things platforms can help better manage energy usage and emissions

Many cities are already using smart waste bins to optimize waste collection routes and reduce fuel and energy costs in the process. Many waste management units also use sensors to keep track of the energy waste disposal systems use and the pollutants they emit. These systems can help cities and organizations to make their waste management process more efficient.

Recently, Bridgera worked with a waste management company to streamline its waste collection process. The project offered real-time analytics for the admin team, helped streamline the operations and make them more efficient, and at the same time created a better experience for homeowners and drivers.

IoT platforms can help better understand the state of waste management in a city or a town

IoT platforms can collect vast amounts of data from a city’s waste management operations. It can provide detailed analytics into the amount of waste collected, fuel used, the rate of emissions, energy recovery, and other data.