Section 2: Campus Waste Segregation Guide

IZTECH has developed a user-friendly, clear, and practical Waste Segregation Guide to ensure the proper separation of waste across the campus. The purpose of this guide is to provide every member of the campus community — students, academics, and staff alike — with quick and reliable information on how to correctly dispose of their waste.

The guide not only explains where each type of waste should be placed but also aims to prevent contamination between waste streams, thereby improving recycling quality and reducing impurities. Through this system, recyclable materials are genuinely recovered, organic waste is efficiently composted, and hazardous waste is managed without harming the environment.

The IZTECH Waste Segregation Guide offers clear, actionable instructions that can be easily implemented in daily campus life. It includes appropriate segregation rules for different waste types across all areas of the campus — from laboratories and cafeterias to offices and outdoor spaces.

This section serves as a quick-reference manual answering the question: “Which waste goes where?”

Each category is supported by practical examples, aiming to make waste management a natural and effortless part of everyday campus life.

Figure : Waste Segregation Station Installed Across the Campus

2.1. Understanding Waste Bins: Color Coding and Labeling

The first step toward proper waste segregation is recognizing the bins. The waste bins used across the campus are designed to be easily distinguishable through both color coding and labeling systems. This structure enables everyone to quickly identify which waste belongs in which bin.

Color Coding Guide

The color system used on the IZTECH campus is designed to be aligned with national standards and user-friendly:

• Blue: Paper and cardboard waste

• Yellow: Plastic waste

• Green: Glass waste

• Gray: Metal waste

• Brown: Organic waste (from cafeterias, kitchens, and gardens)

• Other: General (mixed) waste

Each bin is accompanied by high-resolution icons and sample images that clearly indicate what materials can and cannot be disposed of inside.

Clear Labeling and Visual Guidance

Large, legible, and illustrated labels placed on the bins help users make the right choice without hesitation. These labels feature not only text but also example product images (e.g., PET bottles, cardboard boxes, glass bottles) to ensure clarity.

Moreover, bins are strategically located in high-traffic areas across the campus, enhancing visibility and encouraging proper use. This approach fosters a strong environmental awareness culture, making waste segregation an integral part of daily campus life.

Figure : Color-Coded Waste Bins Across the Campus – Items Accepted and Not Accepted

2.2. Waste Guide

This guide clearly explains which bin each of the most common waste types in campus life should be placed into.

If you are unsure, it is better to dispose of the item in the General Waste bin rather than risk contaminating the recycling bin

Metal Recycling Bin (Gray)

What Can Be Disposed:

• Clean and food-free tin cans

• Beverage cans

• Aluminum foil and containers

• Metal lids

• Empty, non-hazardous aerosol cans

Preparation:

• Rinse containers that contained food with water and dry them.

• Do not dispose of metals with oil or chemical residues**.**

Paper/Cardboard Recycling Bin (Blue)

What Can Be Disposed:

• Newspapers, magazines, brochures

• Notebooks, books, envelopes (no need to remove plastic windows)

• Clean paper bags

• Cardboard and corrugated boxes

• Clean parts of pizza boxes without grease or food residue

Preparation:

• Flatten cardboard boxes.

• Do not recycle dirty or wet paper

Plastic Recycling Bin (Yellow)

What Can Be Disposed:

• Beverage bottles (PET, HDPE)

• Shampoo, detergent, and cleaning product bottles

• Yogurt, margarine, and food containers

• Plastic lids and cup covers

• Clean plastic bags and transparent wrapping films

Preparation:

• Empty and rinse bottles and containers.

• Ensure no food residue remains.

• Compress items when possible to save space in the bin.

What Cannot Be Disposed:

• Stretch film and chip bags

• Black plastics (cannot be detected by optical sorters)

• Single-use cutlery and plates

• Plastic straws, cups, and stirrers

These materials are non-recyclable and should be placed in the General Waste (Black) bin.

Glass Recycling Bin (Green)

What Can Be Disposed:

• Glass bottles and jars (for beverages, sauces, preserves, etc.)

Preparation:

• Remove lids and place them in the metal bin.

• Rinse glass items and place them empty into the bin.

What Cannot Be Disposed:

• Porcelain, ceramics, mirrors, and window glass

• Light bulbs and heat-resistant glassware (cups, oven dishes, etc.)

These materials have different compositions that disrupt the recycling process.

Organic Waste / Bio-Waste Bin (Brown)

What Can Be Disposed:

• All food scraps (cooked or raw)

• Fruit and vegetable peels

• Coffee grounds and tea bags

• Paper towels, napkins, and wilted flowers

Preparation:

• Pour liquid foods (soups, sauces, etc.) down the drain.

• When possible, use paper or biodegradable bags for disposal.

Organic waste is processed in the campus composting system, and the resulting compost is used in campus green areas.

General Waste / Non-Recyclable Waste Bin (Black)

What Can Be Disposed:

All waste that cannot be placed in recycling bins, such as:

• Cardboard coffee cups (due to inner coating)

• Chip bags, stretch film

• Wet wipes, broken porcelain, and ceramics

• Sanitary pads, vacuum-sealed coffee packages

• Incandescent and halogen bulbs

Important Note:

Items labeled as “Compostable” (e.g., cups, cutlery, and plates) should also be disposed of in this bin, as they can disrupt the organic waste process unless an industrial composting facility is available.

Special Collection Points

Batteries:

Portable batteries (e.g., AA, AAA, button cells) must be disposed of in the Waste Battery Collection Boxes located throughout the campus

Electronic Waste (E-Waste):

All devices with plugs, batteries, or rechargeable systems — such as phones, earphones, keyboards, and cables — should be placed in dedicated E-Waste Collection Points

Hazardous Waste:

Aerosol cans containing hazardous materials (e.g., paint, adhesives, or chemicals), as well as energy-saving bulbs and fluorescent lamps (which contain mercury), are managed under special hazardous waste collection procedures.

These items must never be disposed of in regular waste bins.

Waste Oil Collection Points:

Used vegetable oils generated in canteens, cafeterias, and laboratory kitchens are stored in sealed barrels and periodically delivered to licensed firms for proper recycling or disposal.

Through ongoing digitalization efforts, all waste containers and storage areas across the campus have been mapped and made accessible online.

The newly developed Campus Waste Container and Storage Map helps users identify the correct disposal points for each waste type, promoting accurate waste segregation at the source.

On this map, users can view the exact locations of containers and storage areas for each waste category.:

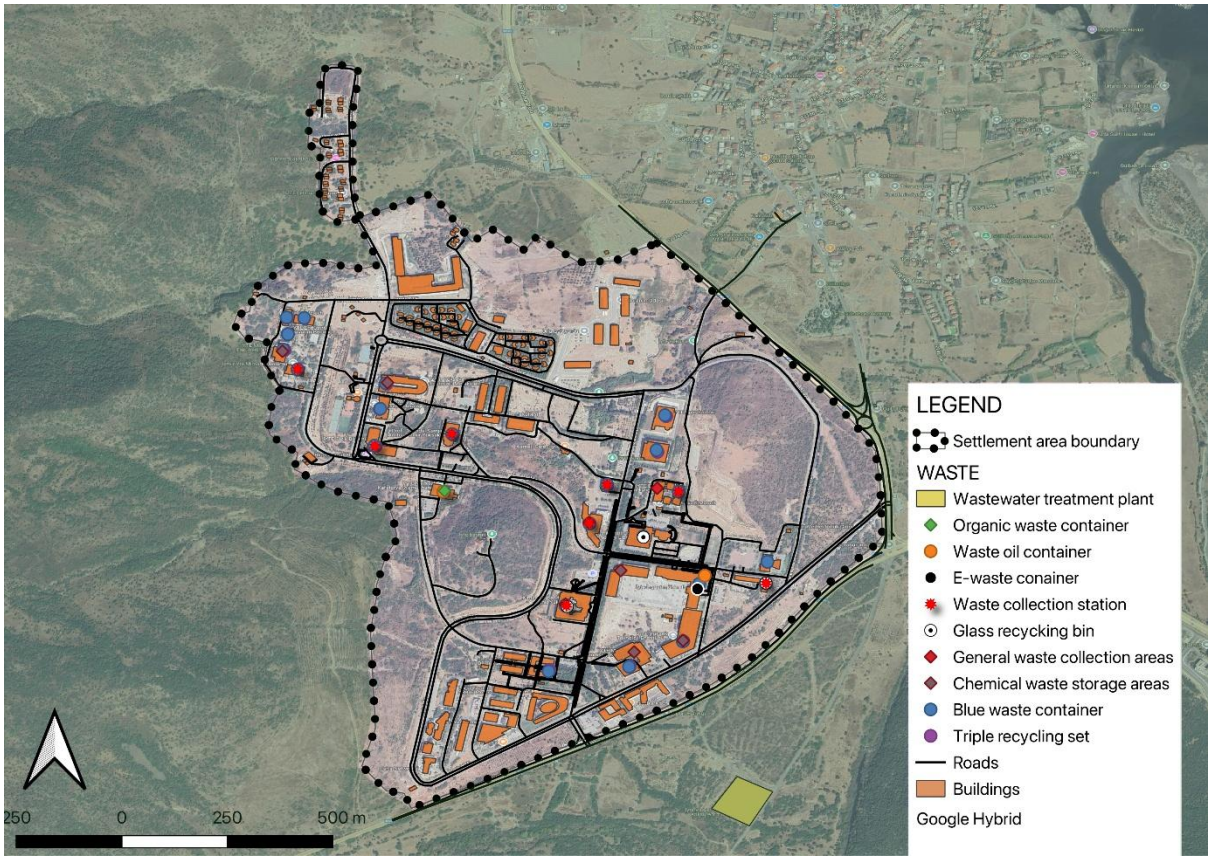

Photo: Main Waste Collection Points

2.3. Special Cases: Commonly Confused Waste and IZTECH Protocols

This subsection provides **clear guidelines** for certain types of waste that are frequently encountered in campus life and are often **disposed of incorrectly.** For each waste type, the **specific IZTECH protocol** and its **rationale** are indicated. The aim is to **prevent contamination** and ensure consistent practices that align with the university's **existing infrastructure and recycling capacity.**

Waste Type	**IZTECH Protocol and Rationale**
Cardboard Coffee Cup	**General Waste.** *Rationale:* The inner plastic coating prevents standard paper recycling. The lid should be disposed of in the plastic bin.
Biodegradable Cutlery	**General Waste.** *Rationale:* IZTECH's organic waste treatment system is not designed for industrial composting. Such materials contaminate the organic waste stream.
Greasy Pizza Box	**Paper/Cardboard (clean parts), General Waste (greasy parts).** *Rationale:* Excess oil prevents paper fibers from being recycled and causes contamination.

Chip Bag	**General Waste.** *Rationale:* The composite (multi-layered) structure cannot be recycled with existing technologies.
Batteries (Portable)	**Battery Collection Boxes.** *Rationale:* Batteries are classified as hazardous waste and must not be mixed with other waste types. They should be placed in the designated collection boxes across the campus.

This table has been prepared to ensure **a standardized practice across the campus** for waste types that often cause confusion. On the website, it should be presented as a **visual guide**, supported by both **text and icons.**

Common Mistakes and Prevention of Contamination

The greatest threat to effective recycling is **contamination.** A single misplaced item can contaminate an entire bin, rendering all its contents **non-recyclable.** Therefore, identifying the most common mistakes and conducting **preventive awareness activities** are of critical importance.

On the website, this section can be presented under engaging titles such as **"Did You Know?"** or **"Top 5 Recycling Mistakes."**

It should include **brief explanations and visuals** to attract user attention and promote proper recycling behavior.

Top 5 Recycling Mistakes

1. Forgetting to Empty Liquids

Beverage bottles or food containers thrown into recycling bins with remaining liquids soak paper and cardboard, causing the entire bin to become non-recyclable.

Rule: Always empty containers completely before disposal.

2. Mistaking Cardboard Cups for Paper

Cardboard coffee cups are lined with a thin layer of plastic, which makes them unsuitable for standard paper recycling.

Rule: Dispose of cardboard cups in the General Waste bin.

3. Confusing Napkins and Wet Wipes

Paper napkins and towels can be placed in the Organic Waste (Brown) bin, whereas wet wipes contain plastic fibers and cannot be recycled.

Rule: Dispose of wet wipes in the General Waste bin.

4. Assuming All Plastics Are Recyclable

Not all plastics can be recycled. Stretch films, black plastic containers, and chip bags cannot be processed with current recycling technologies.

Rule: When in doubt, check the Waste Guide or place the item in the General Waste bin.

The key message of this section should be:

“One wrong item can contaminate the entire bin.”

It is recommended to support this message with short awareness videos or visual warning posters to attract user attention.

Figure : Awareness Poster