



ZERO WASTE MANAGEMENT SYSTEM IMPLEMENTATION GUIDELINE

## HOUSEHOLDS AND HOUSING ESTATES







### **PREFACE**

The amount of waste has been increasing gradually in our country as a result of population growth, increased purchasing power, and technological developments from past to present. This increase necessitates sustainable and integrated waste management through a Zero Waste Management approach.

Direct disposal of waste without applying recycling and/or recovery processes results in loss of both material and energy resources. Based on its multifaceted relations with technical, economic, and social disciplines, sustainable waste management entails zero waste management in the framework of integrated waste management hierarchy with a focus on waste prevention, reduction, reuse, recycling, and recovery.

To ensure the protection and improvement of our natural resources and ecosystems, and the creation of a healthy and liveable environment for the current and next generations within the scope of the responsibilities of our Ministry to generate plans, develop policies, and set targets regarding the zero waste management system, 11 implementation guidelines have been prepared with due regard to the sustainability principles, international norms and national priorities in order to include various stages such as waste prevention, and waste minimization at source, sorting by types, collection, transportation, temporary storage, reuse, and recovery. The guidelines are as the following: Guideline for Local Authorities, Guideline for Organized Industrial Zones and Industrial Facilities, Guideline for Airports and Terminals, Guideline for Shopping Malls, Business Centres, Commercial Enterprises and Plazas, Guideline for Educational Institutions and Dormitories, Guideline for Healthcare Organizations, Guideline for Tourism Facilities, Guideline for Rural Areas, Guideline for Institutions and Organizations, Guideline for Households and Housing Estates, and Zero Waste Blue Guideline.

Zero Waste Implementation Guideline has been developed to determine design and planning criteria, assessment factors, and implementing principles of the zero waste management system in terms of administrative, financial, and technical aspects as well as to lead target audiences for the development, improvement, and promotion of the Zero Waste Management system.

The Zero Waste approach should be implemented with utmost care and precision based on a common objective and language set by the relevant stakeholders in order to realize high-quality practices, prevent waste generation, and ensure cost-efficiency.

Prepared in line with the purposes of making sure that the principles of zero waste approach is understood, establishing the baseline, ensuring the progressive promotion and sustainability of the system, and drawing a roadmap for zero waste management aimed at all the related stakeholders, I wish that the Guideline will be auspicious to all relevant parties, and our country.

I also take this opportunity to thank all the institutions, organizations and our staff that contributed to the development of this Guideline.

#### **Murat KURUM**

Minister of the Environment, Urbanization and Climate Change

### CONTENTS

03

### ZERO WASTE MANAGEMENT

This guideline is prepared to assist a systematic transition to the zero waste management that should be completed on the specified dates, include general information, and activities to be carried out.

### **DESIGNATION OF A WORKING TEAM**

It is considered necessary to establish a working team by designating one person or more who will be in charge of monitoring the process from the establishment of the zero waste management system through its implementation.

05

06

### **PLANNING**

For the planning stage, it is important to identify waste types and sources as well as state of equipment used, and sustainability of the relevant staff. The factors affecting waste types and amounts should also be determined.

### TRAINING/ PUBLIC AWARENESS-RAISING ACTIVITIES

It is important to organize training and awareness-raising activities for the target audience and encourage them to participate in such activities to ensure promotion of the zero waste management system.

15

16

### MONITORING, RECORD-KEEPING, AND IMPROVEMENT

The working team monitors the implementation at certain time intervals to assess its effectiveness and identifies, if any, problematic points, deficiencies or matters to be improved to take measures so as to eliminate them.

# GUIDELINE FOR THE IMPLEMENTATION OF THE ZERO WASTE SYSTEM AT HOUSEHOLDS AND HOUSING ESTATES

This guideline covers general information, activities and plannings as well as principles on monitoring and improvement with regard to zero waste management (ZWM). In Türkiye, ZWM is realized mainly in 2 branches: Local authorities, and buildings-premises. Responsibilities of each implementer are presented below. Provincial ZWM plans are prepared and implemented by a commission designated by the Local Environmental Board under the coordination of the Governorship. ZWM plans require implementers to carry out the necessary activities in accordance with the recommendations given in this guideline, to accomplish waste prevention, reduction and separate collection through the completion of essential infrastructure works, and to provide the acquired data in the Zero Waste Information System.

Table 1. Responsibility distributions in ZWM

### **MINISTRY**

#### Responsibilities:

Determination of Policies and Targets on Waste Prevention and Reduction Preparation of Implementation Guidelines Preparation of Zero Waste Management Action Plan Monitoring, Supervision Zero Waste Information System

### PROVINCIAL DIRECTORATE

### Responsibilities:

Preparation of Provincial Zero Waste Management System Plan\*
Monitoring, Supervising, Coordination
Declaration and Data Tracking
Issuing Zero Waste Certificates

### **LOCAL AUTHORITIES**

Metropolitan District Municipalities
Provincial, District, and Town Municipalities (outside the
Metropolitan Municipality)
Unions of Municipalities
Provincial Special Administrations

#### Responsibilities:

Waste Prevention and Reduction
Establishment of Zero Waste Management System
Operating and Monitoring of the System
Registration to and Data Entry in the Zero Waste
Information System

### **BUILDINGS AND PREMISES**

Public Institutions and Organizations
OIZs and Industrial Facilities
Airports, Terminal, Ports
SMs, Business Centres, and Commercial Plazas
Educational Institutions and Dormitories
Healthcare Organizations
Accommodation Facilities

#### **Households and Housing Estates**

Fuel Stations and Service Areas Chain Markets and Retailers

<sup>\*</sup> To provide local environmental boards with agenda and technical support in the preparation of Provincial Zero Waste Management System Plan.

### WHAT IS ZERO WASTE?

"Zero Waste", which ecological design criteria lay the foundation of, is a waste management philosophy that covers waste prevention and reduction, more effective use of resources, separate collection of waste at source, and waste recovery as well as it is an approach that considers life cycle of waste in order to ensure cultural, economic, and social development.



In ZWM, it is essential to reuse products, extend their economic lifetime, avoid or reduce use of hazardous substances in production, and manufacture recyclable products.

The waste management hierarchy (Table 2) lays the foundation of ZWM system. Accordingly, waste prevention, waste reduction, and waste reuse are among the steps of ZWM system. Waste that cannot be reused or recycled must be utilized through material or energy recovery applications. Establishment of ZWM system is also important in order to reduce the costs that will be required for environmental pollution treatment facilities.

To achieve a successful management model, ZWM system should be planned in design phase of any living arrangements such as housing estates, buildings, neighbourhoods, streets, public squares, schools, plazas, shopping malls (SMs), airports, OIZs and industrial facilities, market places, educational, healthcare, and tourism facilities.

It is ideal for buildings and living arrangements to be constructed in compliance with ZWM by preparing plans in design phase. If it is impossible to achieve the ideal, one can get the result by following the implementation steps, which consist of 4 (Table 3), to establish ZWM system.

Table 3. Implementation steps of ZWM system



### 1. DESIGNATION OF A WORKING TEAM

A working team should be organized by designating people who will be responsible for process management starting from establishment of the system to its implementation and control.

Table 4. Establishment of ZWM system working team

ZWM System Officer

Cleaning Attendants and/or Housekeepers

Atık Geçici Depolama Alanı Görevlileri

\*Working team may be expanded or diversified according to the needs of institutions. It may also involve housing estate management, parks & gardens supervisor, social facility supervisor, janitor, technical supervisors, and households.

### Zero waste team should undertake the following main tasks for a successful implementation:

- Specify what needs to be realized in order to prevent and reduce waste,
- Supply the necessary equipment/units for waste separation and transportation, and ensure the waste delivery to be done to licenced facilities,
- · Inform and train the support staff,
- Record all the activities carried out, and report their environmental, social, and economic impacts along with the related data to authorized people and/or departments,
- Organize awareness-raising activities, such as introductory films, events, etc., to increase the success
  of the ZWM system.



### 2. PLANNING

Planning is the most significant step for an effective waste management. At this step, a baseline analysis will be carried out; principles with respect to waste prevention and reduction will be determined; and needs will be analysed.

#### 2.1. Baseline Assessment:

The main purpose of baseline assessment is to identify waste types, and in what quantity and frequency they are generated, the results of which will shape further planning practices. Baseline assessment specifies the following data:

### Regarding the institution/organization:

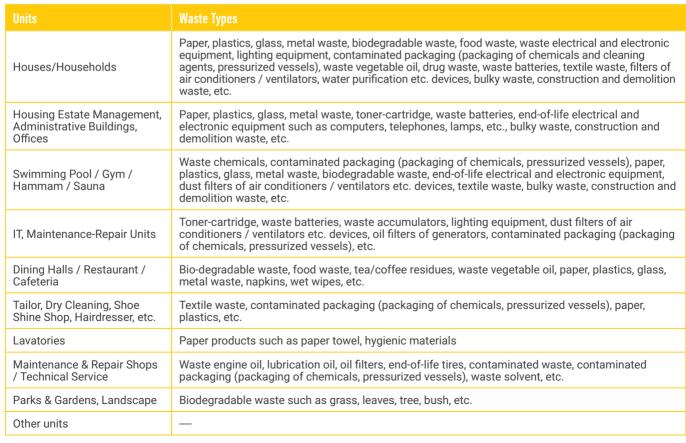
- Number of households (total and for each block)
- Density of resident population

### Regarding waste stream(s):

- · Source and quantity,
- Types and characteristics,
- Reasons of generation<sup>1</sup>,
- Competences of the personnel in both quantity and quality,
- Waste collection and transportation methods,
- Temporary waste storage areas.
- · Waste collection system of recipient municipalities/recycling facilities

Table 5 presents the waste types that would be generated at households and housing estates









At certain intervals, the quantity of generated waste, at each unit, should be measured and recorded (Table 6) to see the general picture.

Table 6. Generated waste by type and quantity (kg)

	Paper	Metal	Plastics	Glass	Food waste	Waste vegetable oil	Battery	Toner cartridge	E-waste	Medical Waste
Houses/Households										
Housing Estate Management, Administrative Buildings, Offices										
wimming Pool / Gym / Hammam / Sauna										
IT, Maintenance-Repair Units										
Dining Halls / Restaurant / Cafeteria										
Tailor, Dry Cleaning, Shoe Shine Shop, Hairdresser, etc.										
Lavatories										
Maintenance & Repair Shops / Technical Service										
Other units										

On the purpose of ensuring the best use of resources, to take inventory regarding the equipment already in use is also considered very beneficial and effective.



### 2.2. Waste Prevention and Reduction

Waste prevention and reduction are the most prioritized steps in the integrated waste management hierarchy. Waste prevention can be both qualitative and quantitative; for instance, preferring a product containing no or less hazardous substances and subsequently reducing its potential to pollute is a type of qualitative waste prevention method. With this approach, the hot spots where waste prevention and reduction are possible to realize will be determined. Following examples and further preventive opportunities may be implemented. Additionally, in order to achieve success, it is encouraged to share the details regarding the implementation process with all the relevant stakeholders such as colleagues, customers, and suppliers through posters and similar advertisement channels, and you can achieve success by delivering training to your employees.



Table 7. Examples of waste prevention and reduction practices

Units	Waste Type	Waste Prevention / Reduction Measures
Households	Paper, plastics, glass, metal waste	<ul> <li>Cutting down the activities that promote consumption, assessing whether there is a need for a product before considering its price and affordability,</li> <li>Opting for traditional bulk products rather than packed products,</li> <li>In the case of procurement of packed products, opting for the products with least packaging to the full extent possible, making use of reusable packaging (e.g., glass jar),</li> <li>Opting for bags made of fabric, etc. rather than plastic bags,</li> <li>Using flask rather plastic water bottle,</li> <li>Using cleaning clothes rather than paper towels and wet pipes,</li> <li>Using covered caps, beeswax wraps rather than stretch film, refrigerator bag and sandwich bag,</li> <li>Opting for brewed tea and coffee instead of single-use packaged tea and coffee,</li> <li>Opting for multiuse alternatives rather than products such as toothpicks, cotton swab, etc.</li> <li>Opting for reusable products instead of single-use plastic plates, cups, forks, spoons, etc.</li> <li>Opting for long-life and recyclable products,</li> <li>Avoiding taking unnecessary print out, adjusting computer and printer for double-side printing,</li> <li>Using one-side printed papers as worksheets,</li> <li>Reusing surplus or non-used product materials or redesigning them for using for other purposes</li> </ul>
	Biodegradable waste, food waste	<ul> <li>Cutting down the activities that promote consumption, assessing whether there is a need for a product before considering its price and affordability,</li> <li>Making inventory control, preparing a shopping list based on needs,</li> <li>When preparing food, primarily making use of products with a close best before/expiration dates,</li> <li>Drying or freezing unconsumed food for consumption afterwards, or making use of such food in different methods,</li> <li>Sharing of excessive food,</li> <li>Ensuring that food left on plates are used for the production of animal feed</li> <li>Compost production from food waste separated properly at source</li> </ul>
	End-of-life electrical and electronic equipment, lighting equipment	<ul> <li>Cutting down the activities that promote consumption, assessing whether there is a need for a product before considering its price and affordability,</li> <li>Opting for repairable, reusable products,</li> <li>Opting for long-life and recyclable products,</li> <li>Providing periodic maintenance without any delay to extend the lifecycle of products,</li> <li>Reusing surplus or non-used products materials or redesigning them for using for other purposes</li> </ul>
	Contaminated packaging (packaging of chemicals, pressurized vessels)	<ul> <li>Opting for alternative products that are suitable for zero waste rather than products that will result in contaminated packaging,</li> <li>Taking care about the contents of products and opting for the products that do not contain hazardous substances,</li> <li>Consuming products completely so that their packaging is empty</li> </ul>
	Drug waste	Checking home whether there is a drug before buying a new one, avoiding to buy unnecessary drugs
	Waste batteries	Opting for rechargeable batteries for reduction of waste batteries

Households	Textile waste and bulky waste	<ul> <li>Cutting down the activities that promote consumption, assessing whether there is a need for a product before considering its price and affordability,</li> <li>Purchasing products as needed,</li> <li>Giving surplus or unused products/materials to those who can use them, ensuring that they are reused or redesigned</li> </ul>						
	Construction- demolition waste	<ul> <li>Continuing to use end-of-life materials/structures</li> <li>Giving end-of-life materials to which, requesting to take them</li> <li>Sorting of the materials (wood, glass, frames, etc.) before demolition</li> </ul>						
	Paper	<ul> <li>Removing dustbins that are placed under desks</li> <li>Making correspondence electronically</li> <li>Adjusting computers, printers and photocopy machines for double-side printing</li> <li>Using ID card printers and photocopy machines that are suitable for the shared use, which are allowed for cancelation before transaction and automatically would cancel the works that is not printed during the working hours rather than individual printers and photocopy machines</li> <li>Using one-side printed papers as worksheets</li> <li>Minimizing the number of printed brochures, catalogues, etc., and ensuring digital access if possible</li> <li>Preventing distribution of ads, announcements, brochures to postboxes of households in buildings, ensuring that such announcements are placed at common bulletin boards or by digital means</li> </ul>						
Housing Estate Management, Administrative Buildings, Offices	Plastics	<ul> <li>Opting for reusable products instead of single-use plastic plates, cups, forks, spoons, etc.</li> <li>Installing hygienic water dispensers on floors rather than plastic bottled water, ensuring staff use their own cups or the cups which are available in the kitchen</li> <li>Reducing the use of plastic files and presentation files</li> </ul>						
	Toner-cartridge	<ul> <li>Using refillable cartridges</li> <li>Taking printouts in the "draft" mode instead of high resolution</li> <li>Adjusting printers' features to black&amp;white mode and taking coloured printouts only when it is necessary</li> <li>Taking printouts with economical fonts</li> <li>Making correspondence in electronic media</li> </ul>						
	End-of-life electrical and electronic equipment, bulk waste (waste tables, chairs, cabinets, beds, etc.)	<ul> <li>•Establishing exchange platforms to enable residents of the housing estate to exchange surplus or unused products/materials with other users,</li> <li>• Establishing repair workshops to enable residents of the housing estate to repair their broken materials or redesign them for using as another product</li> </ul>						
IT, Maintenance-Repair Units	Toner-cartridge, waste batteries, waste accumulators, end-of-life electrical and electronic equipment, such as computers, telephones, lamps, etc., dust filters of air conditioners / ventilators, oil filters of generators	<ul> <li>Purchasing the required service rather than managing the waste generated afterwards by procuring the product based on the approach of "buy the lighting, not the lamp"</li> <li>Opting for repairable, reusable products,</li> <li>Providing periodic maintenance without any delay to extend the lifecycle of products,</li> <li>Opting for rechargeable batteries to reduce waste batteries</li> </ul>						
Dining Halls /	Food waste and food packaging waste							
Restaurant / Cafeteria / Bar	Plastics							
	Glass, Metal	Please refer to the Guideline for Tourism Facilities - HORECA						
	Wet Wipes, Napkins							
	Take-away foods waste							
Lavatories	Napkins	<ul> <li>Providing toilet papers in fixed and locked boxes to prevent excessive usage</li> <li>Installing hand dryer devices instead of paper towels</li> </ul>						

To ensure efficiency in the implementation process, all households must be informed in detail about how to reduce and make use of waste according to the sources of generation.

### 2.3. Needs Analysis

By taking each unit into consideration, all required equipment must be determined, listed, and procured before the implementation process. The required equipment for each unit, such data as dimension, volume, number of equipment, and the areas where they will be placed should be determined.

#### **Placement of Waste Collection Bins**

Waste collection bins must be sufficient in terms of the number of people that will use them, and waste types and quantity as well as be placed at easily accessible areas. To ensure user friendly and systematic planning, needs should be analysed on a building/block basis and thereafter on a floor/corridor basis by also considering the structure of each floor/corridor, the number of people on that floor/corridor, the length of the corridor, the walking distance for people to waste collection bins, easy access for disabled personnel. After such assessment, a pilot study may be carried out only on one or two floors to evaluate the efficiency of the planning.



Excess amount of waste collection bins should be avoided. Once generated, such waste can be taken directly to the area allocated for temporary storage, ensuring to be collected according to the waste codes.

Waste must be collected in the collection bins located in the corridors with care. There must be no dustbins "under desks" or within "rooms" in administrative and technical offices, for example. As a result, such equipment must not be included in the needs list during the needs assessment



### **Determining Collection Equipment**

It must be ensured that recyclable waste such as paper, glass, plastics, and metal is collected separately, that is, without mixing it with other waste types. The needs for equipment required for recyclable waste, biodegradable waste (organic waste) and other types of waste should be assessed by taking all units into consideration. The number, size and type of equipment based on the data obtained from the baseline analysis should be decided.

Pursuant to the legislation, there should be at least dual collection bins (for recyclable waste and other waste). Paper, glass, metal and plastic waste can be collected in a single piece of equipment, or separately by waste type. According to the collection system of a municipality, more than one type of waste can be collected in the same waste collection bin. Please visit https://sifiratik.gov.tr/kutuphane/kurumsal-kimlik to see colours and labels to be applied on waste collection bins.

One basic principle of the zero waste approach is to use existing equipment rather than purchasing new equipment. The important point regarding the collection equipment is not that it is old or used or what material it is made of or what colour it has, but that it is labelled in a colour in compliance with the ZWM system. If there is suitable equipment to be used in waste collection, it can be used after being labelled and/or coloured (any used plastic or metal barrel or container).

Table 8. Models for separate collection



Needs analysis should be finalized after filling in the table below regarding collection points and equipment.

Table 9. Assessment of needs for the recycle bins and containers, identification of collection points

	Collection system									
Nokta				Triple			Quadruple			
	With / without plastic bag	X litre Fixed / Wheeled	Pieces	With / without plastic bag	X litre Fixed / Wheeled	Pieces	With / without plastic bag	X litre Fixed / Wheeled	Pieces	
Houses/Households										
Housing Estate Management, Administrative Buildings, Offices										
Swimming Pool / Gym / Ham- mam / Sauna										
IT, Maintenance-Repair Units										
Dining Halls / Restaurant / Cafeteria										
Tailor, Dry Cleaning, Shoe Shine Shop, Hairdresser, etc.										
Lavatories										
Maintenance & Repair Shops / Technical Service										
Parks & Gardens, Landscape										
Other units										

The size (volume), number and location of waste collection equipment are determined based on the type and amount of waste generated. The frequency of discharging also affects the volume to be determined.

In general, the volume of waste collection bins used indoor and outdoor areas varies from 3 to 120 litres. Waste collection bins can be covered or uncovered, with or without a pedal, and bins over 80 litres can be produced with wheels. Waste collection bins are made of metal (stainless steel, aluminium, galvanized sheet), plastic or wood. When opting for the material, it is important to consider the sustainability of equipment in terms of economic aspects. Existing equipment can also be converted for this purpose. Waste collection bins can be placed at appropriate points in corridors on floors, near public gathering areas and elevators.









Placement of waste collection bins on each floor or at each block is dependent on the needs. Common equipment can be used for a few floors/blocks depending on the amount of waste generated. Likewise, capacities and numbers of transport containers are also directly related to the amount of waste generated. Using resources at a minimum level should be considered as the core of ZWM.

There may be a need to supply containers for transportation of collected waste from waste bins to the Temporary Waste Storage Area. In general, containers with a volume of 120 – 1,100 It are used in such cases. Such equipment can be produced pedal, covered and wheeled.



### **Establishing Temporary Waste Storage Area**

A Temporary Waste Storage Area is used to store the waste collected until the delivery to be done to the licenced waste treatment facilities. A temporary waste storage area should be established by taking into consideration the frequency of collection / transportation in a district, and the amount of waste generated.

Temporary waste storage areas must be established in accordance with the legislation after determining an appropriate place. If there is an existing place that complies with the legislation in technical terms, it would be sufficient to arrange such place without any need to establish a new temporary waste storage area. Types and amount of waste to be collected must be taken into consideration when establishing/arranging this area. The pedestrian traffic and vehicular traffic should be taken into account when planning the transportation of waste to the temporary waste storage area.

The size of the area must be determined based on the number of chambers in the area and the amount of waste to be stored, considering the model to be implemented for the ZWM system. Dimensions of the chambers must be determined based on the volume and number of containers to be placed, and the necessary room for movement.

The principles regarding the temporary storage of waste are stipulated in Article 13 of the Turkish Regulation on Waste Management, and the technical specifications that must be fulfilled by temporary waste storage areas for hazardous and non-hazardous waste are published on https://cygm.csb.gov.tr/atik-yonetimi-i-83468.

NOTE: In the case that the amount of waste to be stored is less or if there is a problem to find an appropriate area, storage may be realized in appropriate formats in more restricted areas. For example, space-saving solutions can be developed through the procurement of containers to be used for storage in a way that such containers will have compartments in which several types of waste can be stored.





Temporary waste storage areas must have a capacity to store various types of waste given in Table 5, such as packaging that contains hazardous material, cleaning chemicals, etc., toner cartridges, waste electrical and electronic equipment, drug waste, etc.

Table 10. Need assessment for temporary waste storage area

Equipment / Structure	Placement / Installation Location	Size	Chamber	Need

Medical waste should be collected with due regard to the issues specified in the Turkish Regulation on Medical Waste Control published in the Official Gazette of 25.12.2017 and issue 29959 and be transported separately from other waste by personnel assigned with the management of medical waste.

# 3. TRAINING/PUBLIC AWARENESS-RAISING ACTIVITIES AND TAKING ACTION

Before the implementation process, it is important to organize training and awareness-raising activities aimed at target audience with regards to informing the personnel, and households, encouraging them to participate in the process, and getting the highest efficiency. Training and awareness-raising activities should be prioritized for the purpose of increasing awareness concerning waste prevention, reduction, reuse, separation at source, and recycle. Therefore, structure of such activities in terms of target audience, participants (experts, speakers, etc.), and topics to be emphasized should be planned.

Particularly, explaining the waste prevention practices to the target audience and informing them periodically in this regard are of great importance. For example, ending the use of pet bottles may get a reaction from people at first, but informing them about the amount of plastic waste prevented will have a positive effect on their recognition of the effectiveness of the practice.

Targeted audience may include households and all employees, including janitors, maintenance-repair staff, staff in charge of temporary waste storage areas, etc. Besides, necessary training and information may be provided to the target audience, fostering activities may be implemented, and visuals and posters along with these activities may be used.

The brochures and posters\* to be prepared and the activities to be carried out will allow implementers to ensure that the system is better understood and adopted. Witnessing the environmental, economic and social benefits of the system is a factor that will support participation. For example, recovering of 1 ton of plastics means a savings equal to 16 barrels of petroleum. Recovering 1 ton of paper from recycling prevents cutting of 17 trees. Waste meter can be accessed at https://sifiratik.gov.tr/sifir-atik/atik-sayaci and be used to calculate the savings achieved after transition to ZWM system.

Training activities must be carried out by the authorized people who have participated in the training events organized by the Ministry of Environment, Urbanization and Climate Change and/or Provincial Directorates of Environment, Urbanization and Climate Change. Training events must be repeated and not be for one time only



\*https://sifiratik.gov.tr/kutuphane/kurumsal-kimlik

### 4. MONITORING, RECORD-KEEPING, AND IMPROVEMENT

The working team monitors the effectiveness of the practice at certain intervals for assessment purposes and determines problematic points, deficiencies or the points to be improved to take measures accordingly.

Providing access to data obtained from the implementation process will ensure a more efficient participation. Those in charge of the ZWM system enter in the Ministry's Online System the information on equipment regarding zero waste management system, types and amounts of waste collected, delivery information, and documents for waste delivered.

Monthly data relating to the waste collected is submitted to the Zero Waste Information System by the 15th of the following month. Requirements must be met considering the deadlines for transition to the Zero Waste Management System, and those concerned must apply through the Zero Waste Information System to receive a zero waste certificate. Zero waste certificates are issued by the Provincial Directorate of Environment, Urbanization and Climate Change of the relevant province.

Through the high-quality documentation process, sustainability reports are prepared to include the activities carried out within the scope of ZWM system, practices, innovations inspired by the system, achievements, and future objectives.









## ZERO WASTE MANAGEMENT SYSTEM IMPLEMENTATION GUIDELINE

This Guideline is prepared by the Ministry of Environment, Urbanization and Climate Change with contribution from UNDP and relevant institutions and organizations, Local Authorities and NGOs based on the consultation and design stages completed as part of the Project for Recovery of Solid Waste for Economy, Revision of National Waste Management and Action Plan (2016-2023) and Preparation of National Waste Management Plan (2023-2035).

