



# Workplace Recycling Guidelines Implement a 'Separation At Source' Recycling Program in Your Office





REUSE

This booklet presents essential instructions for workplaces to implement efficient recycling practices, promoting environmental responsibility and resource management. By adhering to these guidelines, workplaces can make a significant positive impact on the environment while fostering collaboration among offices within commercial buildings. Initiating a waste recycling program is emphasized as a proactive measure toward sustainable practices.

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# RECYCLING UNVEILED

A SUSTAINABLE OFFICE APPROACH

# I. Overview

The Recycling in Jordan Activity is a multi-year Activity funded by the United States Agency for International Development (USAID). The Activity partners with the Ministry of Environment (MOENV), the Greater Amman Municipality (GAM), and private sector recycling companies to enhance the adoption of recycling services within Amman's commercial sector. Through a market-based approach, the USAID Recycling in Jordan Activity aims to enhance and expand private-sector recycling markets, boost the demand for recycling services within Amman's commercial sector, and improve the business enabling environment for recycling services and markets.

In today's environmentally-conscious world, the integration of sustainable practices in the workplace is widely recognized as essential. With employees spending a significant portion of their workday in commercial office buildings, organizations have a unique opportunity to instill recycling values among their staff. By implementing a few straightforward strategies, office recycling efforts can be enhanced, nurturing a culture of sustainability among employees.

Offices generate substantial amounts of waste, such as paper, offering significant potential for waste reduction and recycling. By implementing an effective workplace recycling program, organizations can demonstrate environmental leadership, reduce the volume of waste sent to landfills, recover valuable materials for reuse, and achieve tangible savings in waste management costs.

# 2. This Document

The document titled **"Workplace Recycling Guidelines"** introduces practical and informative instructions designed to assist all workplaces in separating recyclable materials and adopting effective recycling practices on their premises. Adhering to these shared guidelines not only contributes to a positive environmental impact but also promotes responsible resource management within the workplace. To ensure the success of such an initiative, collaboration among all offices within the commercial building or complex is deemed crucial. The initiation of a waste recycling program within a commercial building that houses the workplace is considered a proactive step toward advancing sustainability.

Below, we provide a comprehensive, step-by-step guide to assist in the effective establishment of a waste recycling program. These guidelines outline the minimum requirements for implementing a waste recycling program in workplaces and commercial buildings. The operational guidelines should be followed by all employees and workplaces responsible for generating waste within their premises, as well as those involved in waste collection within the premises or involved in coordinating waste collection. These guidelines should also be considered by individuals or entities receiving, storing, treating, or transporting waste, as they will need to keep the waste separate from other types of waste or substances.

# 3. Glossary

Waste:	Refers to the byproducts of a waste generator's regular operations that no longer hold any utility or value for the waste generator's primary business activities. Waste products are deemed recyclable if they can be safely repurposed, reused, and/or sold, including for export. It's important to note that medical waste is not considered recyclable. Nevertheless, waste generated by hospitals, pharmacies, and medical offices, which is non- medical in nature, may be eligible for recycling.
Waste Management:	This involves comprehensive oversight of waste processes, encompassing waste generation, handling, cleaning, processing, storage, collection, and transportation from its point of origin to its ultimate recovery or disposal destination. This management extends to the efficient operation and subsequent maintenance of disposal sites. Recycling is a versatile process that can be incorporated at any stage of the waste management system.
Recycling:	It serves as an integral step within the sustainable waste management hierarchy, aimed at preventing waste from ending up in landfills. Through this process, waste is reclaimed for future use, involving the separation of waste from the waste stream for subsequent utilization and the processing of the separated material into a product or raw material
Waste reduction or prevention:	This entails the reduction of material originating from a specific source by addressing the manufacturing, processing, or consumption patterns typically responsible for generating that material.
Recyclable materials:	These are materials that have been recovered or diverted from the non-hazardous solid waste stream with the intent of reuse, recycling, or reclamation. A significant portion of these materials is utilized in the manufacturing of products that might otherwise be produced using raw or virgin materials. Typically, recyclable materials encompass metals, paper, cardboard, glass, and plastics.
Separation at Source (SAS):	This approach involves the separation of waste based on the type of material, with the aim of processing and recovering that material. For instance, it entails the separation of recyclables from the waste stream generated by commercial establishments or buildings.
Collection:	This refers to the gathering of waste, including the initial sorting and preliminary storage of waste, with the purpose of transporting it to its final acceptable recovery or disposal destination.
Food waste:	Food waste encompasses all biodegradable waste resulting from food preparation or consumption, including items such as fruit and vegetables, dairy products, coffee grounds, tea bags, bread, rice, meat, chicken, fish, and similar items. Food waste specifically excludes grease-trap waste and any associated packaging. It is frequently referred to as organic waste.
General waste:	This term pertains to any materials, substances, or objects that have been discarded or abandoned. General waste is characterized by being non-recyclable, non-hazardous, and non-food waste, typically fitting within a public or municipal container commonly referred to as 'garbage.' Such as: Napkins and Tissues, certain types of packaging, and non- recyclable plastics.
Separate collection:	This refers to the practice of collecting waste in a manner where different types and natures of waste are kept separate, ideally right at the source. This separation is done to facilitate specific and targeted treatment of each waste stream.
Office building:	An office building is defined as a structure primarily used for conducting business, clerical, or professional activities, and it typically excludes retail and industrial activities. Additionally, these buildings are generally not open to the public.

# 4. Waste Management Framework Law

In alignment with the Jordan Waste Management Framework Law for the year 2020 (Article 6), commercial waste generators are mandated to enhance their waste management practices within their premises. The objective is to prevent pollution and mitigate its impact on the environment, public health, and sustainable development. This is to be achieved through the following measures:

- a. Reduce the generation of all types of waste, including Special Waste.
- b. Promote reuse practices.
- c. Implement separation of waste at source, including Municipal Waste, in accordance with the prescribed environmental standards.
- d. Manage waste in a way that promotes recovery.
- e. Reduce the hazardous attributes of waste to a minimum.
- f. Waste that cannot be reduced, reused, recycled, or treated in an environmentally responsible manner should be disposed of through incineration or burial, adhering to established criteria and objectives.



The fundamental principles to be embraced in waste management, as outlined in Jordan Waste Management Framework Law for the year 2020 (Article 7), are:

- I. Prevention: Focusing on measures to reduce waste generation at its source.
- 2. Precautionary Principle: Taking preventive action in the face of potential environmental risks, even when the scientific evidence may be inconclusive.
- 3. Principle of Extended Producer Responsibility: Placing the onus on producers to manage the waste resulting from their products throughout their lifecycle.
- 4. Polluter Pays Principle: Requiring those responsible for pollution to bear the costs associated with managing and mitigating the impacts of that pollution.
- 5. Proximity Principle: Managing waste as close to its source as possible, which promotes efficiency in waste treatment and disposal.

RECYCLING ROADMAP

**GETTING STARTED** 

# 5. Setting Up Workplace Recycling

# 5.1 Getting Started

# STEPS ON HOW TO RECYCLE



# I. Building Administration Liaison

Contact the building administration to familiarize yourself with existing waste management and recycling regulations or policies (refer to Annex I for building administration details form). **Task Owner: Recycling Initiative Owner** 

#### 2. Stakeholder Engagement

Reach out to essential stakeholders, including neighboring offices and businesses in the building, to introduce them to the recycling program. Emphasize the environmental benefits and encourage knowledge and resource sharing.

Task Owner: Recycling Initiative Owner

#### 3. Formation of the Green Team and Waste Assessment

Designate a coordinator from each office and establish the "Green Team" within the building. Assign roles and responsibilities for effective collaboration. The Green Team will attend meetings organized by the building administrator. Their initial task is to provide general waste information and complete the form in Annex 2 for office data collection forms, which will be summarized by the building administrator in form provided in Annex 3 (Building Summary Form) to create a generic understanding of current waste situation and share with the Recycling Service Provider (RSP).

Task Owner: Recycling Initiative Owner and Building Administrator

#### 4. Recycling Service Provider Collaboration

Refer to section 7 and contact local recycling service providers to understand their services, pricing, and requirements. Ensure they can handle the materials your building intends to recycle. Reach an agreement on collection frequency to determine equipment and logistics for the recycling program. *Task Owner: Building Administrator* 

## 5. Equipment Requirements

Refer to Annex 4 to determine the number of bins required based on the number of employees, collection frequency by RSP, and other factors. Identify the precise quantity and type of recycling bins needed for your specific requirements. Alternatively, you may refer to section 5.4 for a recommended design that takes into account the number of employees.

Task Owner: The Green Team

#### 6. Instructive Signage

Label bins clearly with instructive signage to facilitate recycling for employees, making it a seamless and straightforward task. Refer to Annex 6 for the Separation at Source (SAS) poster.

#### Task Owner: The Green Team

## 7. Awareness Campaign

Initiate an educational campaign in your office to raise awareness about the recycling program. Share information about recycling advantages and provide guidance on effective material separation. For more details please refer to Section 8.

#### Task Owner: The Green Team

#### 8. Monitor Progress

Continuously monitor the progress of your recycling program and encourage other offices to do the same. Collaborate with your service provider to obtain records of recyclables collected to assess the program's effectiveness.

Task Owner: Building Administrator in collaboration with The Green Team

# 5.2 Commence your office recycling program

To initiate your office recycling program, follow these essential steps:

#### I. Management Commitment:

Begin by obtaining management's commitment and support for the adoption of recycling practices within the premises. Management buy-in is crucial to the success of your office recycling program.

 Environmental Policy or Mission Statement: Establish an environmental policy or mission statement that commits your company to recycling and waste prevention.

## 3. Program Name or Slogan:

Create a distinctive name or slogan for your recycling program. This will help promote the recycling concept among employees.

**4. Employee Communication:** Write a memo addressed to all employees to introduce the program. Include an article in your company newsletter that details the program.

#### 5. Recycling Team Formation:

Identify employees who have an interest in recycling and create a "Recycling Team." Members of this team can play a pivotal role in program implementation and lead employee training sessions.

#### 6. Information Dissemination:

Post lists of recyclable items and guidelines for proper disposal to educate and inform employees about the recycling process.

# 5.3 Understanding your Waste

The composition of waste in a workplace, particularly in an office setting, can vary based on factors like office size, type, industry, and specific practices. In a typical office environment, the waste composition often falls into the following categories:

TYPE OF SOLID WASTE	DESCRIPTION
Paper Waste	Used paper, printed documents, photocopies, and outdated publications. Empty cardboard boxes from office supplies or shipments. Typical Percentage: 40-60%
Plastic Waste	<ul><li>Empty plastic bottles and containers (e.g., water bottles, beverage cups, food containers).</li><li>Plastic packaging materials (e.g., wraps, salads packaging).</li><li>Typical Percentage: 10-20%</li></ul>
Organic Waste	Food waste from employee lunches or snacks. Coffee grounds and used tea bags. Typical Percentage: 5-10%
Electronic Waste (E-Waste)	Old or non-functional electronic devices (e.g., computers, monitors, keyboards, mice, printers, printing ink cartridges, cables). Batteries and small electronic accessories Typical Percentage: 2-5%
Metal Waste	Aluminum cans, foil (e.g., soda cans). Metal packaging materials (e.g., tin cans). Typical Percentage: 1-3%
Glass Waste	Empty glass bottles (e.g., glass beverage bottles). Occasionally, broken glass from accidents. Typical Percentage: 1-2%
General Non-Recyclable Waste	Items that cannot be recycled or composted, such as Napkins and Tissues, certain types of packaging, and non-recyclable plastics. Typical Percentage: 5-10%
Hazardous Waste (Infrequent)	Batteries and fluorescent light bulbs (less common in an office setting but may be present in larger organizations). Typical Percentage: Less than 1%
Miscellaneous Waste	Miscellaneous items like pens, office supplies, and small items that may not fit into the categories above. Typical Percentage: 5-10%

# Typical Workplace Waste Composition



# 5.4 Setting up Recycling Equipment at your Office

#### Office bins estimation based on number of employees

You can determine the quantity and size of bins required by considering your total full-time employee count. The table below provides **recommendations** regarding bin capacities and quantities to effectively implement a successful recycling program in your workplace. Should you require additional information or if your employee count is not listed, please refer to **Annex I** for further clarification.

# of staff	Collection Frequency	Bins (Numb	er/Cap	acity ir	n Liters)	Example			
		Paper		Mixed Recyc	l lables	Paper		Mixed Recyclables	
5-10	Weekly	2/80L		I/80L					
		Paper	Plastic	Metal	Batteries	Paper		Paper, Plastics and Metal	Batteries
10-20	Weekly for Paper, Plastic and Metals Monthly for Batteries	4/80L	2/80L	2/80L	1/10L	* Y hav sta paj wit oth att to a thr apa bin res a t	You can ve two andalone per bins, th the ner two cached the erture as, sulting in cotal of ur bins.	PAPER PLASTIC	
		Paper	Plastic	Metal	Batteries	Paper		Paper, Plastic and Metal	Batteries
20-30	Weekly for Paper, Plastic and Metals Monthly Batteries	2/120L or 3/80L	3/80L	3/80L	1/20L				

# of staff	Collection Frequency	Bins (Numb	er/Cap	acity ir	n Liters)	Example		
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
30-40	Weekly for Paper, Plastic and Metals Monthly for Batteries	3/120L or 4/80L	4/80L	4/80L	1/20L		PLASTIC &	
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
40-50	Weekly for Paper, Plastic and Metals Monthly for Batteries	4/120L or 5/80L	5/80L	5/80L	2/20L	R CLEAN PAPER		
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
50-60	Weekly for Paper, Plastic and Metals Monthly for Batteries	5/120L or 5/80L	5/80L	5/80L	2/20L			

# of staff	Collection Frequency	Bins (Numb	er/Cap	acity ir	n Liters)	Example		
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
60-70	Weekly for Paper, Plastic and Metals Monthly for Batteries	6/120L or 6/80L	6/80L	6/80L	2/20L			
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
70-80	Weekly for Paper, Plastic and Metals Monthly for Batteries	7/120L or 7/80L	7/80L	7/80L	2/20L		C C C C C C C C C C C C C C C C C C C	C.
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
80-90	Weekly for Paper, Plastic and Metals Monthly for Batteries	7/120L or 8/80L	8/80L	8/80L	3/20L			

# of staff	Collection Frequency	Bins (Numb	er/Cap	acity ir	n Liters)	Example		
		Paper	Plastic	Metal	Batteries	Paper	Paper, Plastic and Metal	Batteries
90- 100	Weekly for Paper, Plastic and Metals Monthly for Batteries	2/240L or 4/120L or 9/80L	9/80L	9/80L	3/20L			

# 5.5 Central Collection Point in the Building

Setting up a Central Collection Point in the building involves several crucial steps.

- 1. Consult with Your Recycling Service Provider (RSP): Start by engaging in a discussion with your Recycling Service Provider (RSP). This conversation should encompass three essential points:
  - Determine the frequency of recyclable collection (hauling schedule).
  - Clarify who is responsible for procuring the bins (bins procurement responsibility).
  - Understand the operational model of your RSP (their business modality) <sup>1</sup>.

Once you have reached a consensus on these elements, you can move forward with the selection of the suitable bin sizes and types. Delegate this responsibility to the Recycling Service Provider, allowing them to assess the required container sizes and quantities based on their expertise and past evaluations.

To confirm the recommended sizes suggested by the RSP, please refer to Annex I for further clarification. In summary, engaging in these discussions with your RSP and considering factors such as collection frequency and the volume of recyclables generated by each office will aid in selecting the ideal bin sizes for the Central Collection Point in the building.



<sup>&</sup>lt;sup>1</sup> <u>Recycling Service Provider business modalities:</u>

<sup>-</sup> **Recycle Material Procurement Service:** In this business modality, Recycling Service Providers (RSPs) engage in buying recyclable materials directly from individuals or entities who generate waste. RSPs typically pay a certain amount per unit or weight of the recyclable materials, providing an incentive for waste generators to separate and sell their recyclables rather than discarding them.

<sup>-</sup> **Recycle Collection and Transportation Service**: Under this modality, RSPs offer collection and transportation services for recyclable materials, indicating that RSPs get compensated for these services.

<sup>-</sup> Zero-Cost Recyclables Collection Service: RSPs offer to collect recyclable materials from waste generators or businesses at no charge. While the service is provided without a direct fee to the waste generators, the RSPs typically generate revenue by selling the collected recyclables to recycling facilities or manufacturers.

#### 2. Procure the Bins Based on Agreed Terms.

After determining the amount of waste generated by each office in the building, it is crucial for the building administration and all the organizations located there to establish a consensus on the procurement of bins and the allocation of associated costs. If the service provider's arrangement involves providing bins in exchange for recyclables collection, it's imperative for all identified stakeholders to be in alignment with this approach. Remember that the specific needs of your workplace may vary, so consider this as a general guide to help you initiate the process. Regular monitoring and adjustments are essential for sustaining an efficient recycling program.

# 5.6 Placement of Bins

To strategically place recycling bins throughout the workplace, follow these steps:

- 1. **Conduct a Walkthrough:** Begin by walking through your office space to identify key areas where people generate recyclable waste. This may include common locations such as:
  - Near individual workstations or desks.
  - In break rooms or kitchens.
  - By photocopiers and printers.
  - In high-traffic areas like entrances and meeting rooms.
- 2. Consider Convenience: Position recycling bins in areas where they are easily accessible and where people naturally dispose of recyclables. Convenience encourages participation. Also, be mindful of the flow of people through the office, ensuring that bins do not obstruct traffic but remain easily accessible.
- 3. Set Up Central Stations: Consider establishing central recycling stations in high-traffic areas. These stations can include separate bins for different recyclables, making it simple for employees to dispose of various materials in one convenient location.

# RECYCLING SERVICE PROVIDERS

# 6. Recycling Equipment Suppliers

The Recycling in Jordan Activity has identified recommended suppliers from whom you can purchase bins and containers. You can find their information in the following table:

Service Provider	Mobile	Email
Green Dot Recycling	0777252705	sales@greenspotjo.com
Munich Waste Management	0797200509	info@sws-waste.com
Green Gardens	0799642640	green.gardens7894@gmail.com
Safe and Clean	0776186362	mhoammad.t@safeandcleanjo.com
Al-Harra for wood containers	0798812651	harraproject@gmail.com
Lahaf Company	0792835117	lahaftrading@gmail.com
ALNOUF For Industrial Equipment (AIE)	0777283665	kholoud@alnouf.com
Explorer Logistic Services	0777787828	info@els-jo.com
Jordan Reach General supplies	0799810002	Anask@joreach.com
Ali Baba trading company	0777862328	<u>hassanalhayek@gmail.com</u>
Sami Bashiti & Partners Co.	0795705095	rami.nassar@mega-hardware.com
Bashiti Hardware	079 8138262	Hamza@bashitihardware.com
MidMac Environmental	0796000414	hadil.b@gmail.com
Abo Omar Diab For Trading	0795371194	Moh.diab.omar@gmail.com
V-Tech	0799916093	<u>yazeed@vtech-sys.com</u>
Saleh Meshal	0797111147	Salehmeshal@yahoo.com

# 7. Engaging with Recycling Service Providers

As previously mentioned, consulting your Recycling Service Provider (RSP) is of utmost importance when determining the criteria for selecting bins. The USAID Recycling in Jordan activity has identified several Recycling Service Providers that are known for their efficiency and reliability. You can find their details in the following table:

Recycling Service Provider in Amman	Mobile	Email
Faster Step	0791440500	fasterstep2016@gmail.com
Green Gardens	0799642640	green.gardens7894@gmail.com
Safe and clean	0776186362	mhoammad.t@safeandcleanjo.com
Green Future	0799263339	hanan.greenfuture@gmail.com
<b>BE Environmental Services</b>	0776606707	<u>om@be.jo</u>
Jordan Environment Society	0798786339	<u>maannasayreh@yahoo.com</u>
Ajyal For Recycling	0798560392	info@alajialrecycling.com
Zero waste For Recycling	0795937359	<u>Amer.alamayreh@gmail.com</u>
GreenJo For Recycling	0799903030	<u>Greenjo.app@gmail.com</u>
Hanoover Management	0797050040	hanoovermanagement@gmail.com
E-Recycle Hub For Recycling	0797868860	e-radwan@erecyclehub.com
Capital for Cleaning Services	0790624994	<u>Michel@asima.net</u>

# RECYCLING RESOURCES

GOING BEYOND THE BASICS

# 8. Raise Awareness

Raising awareness among office employees about recycling is paramount to the success of your recycling program. Here are some effective ways to achieve this:

- 1. Educational Workshops and Seminars: Host workshops or seminars to educate employees about the significance of recycling, the types of materials that can be recycled, and the environmental benefits. Consider inviting experts or environmental organizations to deliver engaging presentations.
- 2. Regular Communication: Maintain recycling awareness with frequent email updates, newsletters, or bulletin board notices. Share recycling success stories, tips, and reminders regarding recycling practices.
- 3. Visual Aids and Signage: Utilize clear and visually appealing signage near recycling bins to indicate what can and cannot be recycled. Make it simple for employees to understand and adhere to the guidelines.
- 4. Engaging Challenges and Competitions: Organize recycling challenges or competitions among teams or departments. Offer incentives or rewards for reaching recycling goals, such as waste reduction or increased recycling rates.
- 5. Clear Recycling Stations: Establish well-organized recycling stations in common areas with clearly labeled bins for different types of waste. Ensure these stations are easily accessible and visible.
- 6. Interactive Online Platforms: Create an internal online platform or social media group where employees can exchange tips, success stories, and questions related to recycling.
- **7. Sustainability Events**: Host sustainability-themed events or fairs within the office, showcasing eco-friendly products and services. These events can serve as a platform to educate employees about recycling. Refer to the attached Eco-friendly checklist in this guideline (Annex 2).
- 8. Lead by Example: Leadership and management should actively participate in recycling efforts to set a positive example for employees.
- **9. Measure and Share Progress**: Regularly assess and communicate the progress of your recycling program. Highlight achievements and celebrate milestones to motivate employees. Collaboration with your Recycling Service Provider (RSP) can provide progress reports.

By implementing a combination of these strategies, you can foster a culture of recycling awareness and participation among your office employees, ultimately leading to more effective and sustainable recycling practices.

# 9. Reduce Practices

Given that paper accounts for the highest volume of waste generated in the workplace, conserving paper represents both an environmentally responsible and economically efficient approach to enhancing productivity. Here's a guide on minimizing paper consumption:

- 1. **Digital Documentation**: Promote the use of digital documents for internal communication, reports, and memos. Instead of printing, distribute documents via email or a shared digital platform.
- 2. Double-Sided Printing: Configure printers to default to double-sided printing to reduce paper consumption. Encourage employees to do the same for their personal printing needs.
- **3. Digital Signatures**: Employ digital signature software to sign and approve documents electronically. This eliminates the need for physical signatures on printed papers.
- 4. Email Receipts and Invoices: Request electronic receipts and invoices from suppliers whenever possible. This reduces the need to print and file paper copies.
- 5. **Paperless Meetings**: Encourage the use of laptops or tablets during meetings for notetaking and document sharing. Implement digital whiteboards or projectors for presentations.
- 6. QR Codes for Business Cards: Implement QR codes as an alternative to traditional business cards with the following steps:
  - a. Generate QR Codes: Use a QR code generator to create a unique QR code for each employee containing contact information like name, email, phone number, and website.
  - b. Print QR Codes: Print the QR codes on employees' existing business cards or create new cards with just the QR code and minimal branding. Consider using recyclable or eco-friendly paper if necessary.
  - c. Training: Provide employees with instructions on using QR codes and ensure they have the necessary tools, such as a QR code reader app on their smartphones.
  - d. Implementation: Encourage employees to share their QR codes digitally through email signatures or messaging apps, reducing the need for physical business card exchanges.
- 7. **Recycling Stations**: Place easily accessible recycling bins throughout the office to encourage proper disposal and recycling of paper waste.
- 8. Paper Reduction Policies: Establish and communicate clear office policies for paper usage and recycling. Encourage employees to print only when necessary and to recycle paper properly.

By implementing these steps your workplace can significantly reduce paper usage, save costs, and contribute to a more sustainable and environmentally conscious office environment.

# 10. Recycle Right

Proper recycling entails understanding how to recycle each type of waste stream effectively. Here's a brief overview:

#### Paper and Cardboard:

- Recycle clean and dry paper and cardboard materials.
- Accepted items include office paper, newspapers, magazines, cardboard boxes, cereal boxes, and paper packaging.
- Remove any plastic or non-paper elements before recycling.
- Paperboard containers and boxes should be broken down and flattened.
- Loose sheets of assorted paper can be stacked.
- Paperclips and staples do not need to be removed.
- Do not attempt to recycle used paper towels or napkins.
- Do not attempt to recycle waxy paperboard, such as that used for margarine boxes and mailers.
- Cardboard boxes should be broken down flat.
- Keep cardboard and paperboard products dry and covered against rainfall.
- Do not bundle, bind, or bag your cardboard using plastic materials.
- Do not attempt to recycle cardboard with grease stains or food residue.

Paper and cardboard, free of coffee spills, can be recycled around five to seven times before degrading in quality. There are several ways to reduce your usage of these materials, such as providing designated paper recycling containers in copy rooms and next to each person's desk. Additionally, printing double-sided and making copies or prints only when necessary can significantly reduce your paper output.

#### **Plastics**

- Check for recycling symbols (e.g., PET, HDPE) on plastic containers.
- Accepted items include plastic bottles, containers, and jugs.
- Rinse containers to remove any leftover residue.

Learn which plastics are accepted for recycling and, whenever possible, choose durable alternatives like personal aluminum or glass water bottles, washable food containers, and reusable bags. Below is a compilation detailing various types of plastics, their characteristics, intended applications, and their recycling potential.

#### **Plastic Types**

	Polyethylene Terephthalate (No. I PETE /	<b>Description</b> : Clear, strong, and lightweight plastic used for single-use food and drink packaging, like soda and water bottles, salad dressing bottles, and peanut butter containers. <b>Recyclable</b> : Yes, PETE is fully recyclable, and it's the most
PETE	PET)	common plastic in circulation. Rinse out any food residue and ensure items are dry before recycling.
$\mathbf{A}$	High-Density	<b>Description</b> : Commonly found in household products like milk jugs, cleaning containers, shampoo and detergent bottles. It's lightweight but durable.
HDPE	(No. 2 HDPE)	<b>Recyclable</b> : Yes, HDPE is easy to recycle and can be recycled up to 10 times for new products. Ensure items are clean, rinsed, and dry before recycling.

	Polyvinyl Chloride (No. 3 PVC or V)	<ul> <li>Description: Versatile and used in piping, medical equipment, plastic gloves, building products, water-resistant clothing, and some food packaging.</li> <li>Recyclable: Recycling PVC can be challenging. When disposed of, it can be toxic, and recycling it is not easily accessible. However, it is possible to recycle PVC effectively because of the various types of PVC available. There are many types of PVC, some of which can be recycled by specialized recyclers to create products such as piping, fencing, paneling, gutters, floor tiles, and mats.</li> </ul>
LDPE	Low-Density Polyethylene (No. 4 LDPE)	<ul> <li>Description: Known for use in shopping bags, squeezable bottles, furniture, clothing, and frozen food packaging. It is transparent, flexible, and tough.</li> <li>Recyclable: LDPE can be recycled, but the ease of recycling depends on the type of plastic. Flexible products are more challenging to recycle, while more rigid forms are easier to recycle.</li> </ul>
	Polypropylene (No. 5 PP)	<b>Description</b> : Rigid, tough, and resistant to moisture, grease, and chemicals. Used for ketchup bottles, kitchen containers, straws, carpets, rope, and medicine bottles. <b>Recyclable</b> : Yes, polypropylene is adaptable and can be recycled into various products.
	Polystyrene (No. 6 PS)	<b>Description</b> : Lightweight and often used for single-use items like egg cartons, Styrofoam packaging, packing peanuts, disposable cups, and dinnerware. <b>Recyclable</b> : Polystyrene is difficult to recycle and takes a long time to decompose. It's not an eco-friendly option.
OTHER	"OTHER" (No. 7)	<ul> <li>Description: A miscellaneous category for plastics not fitting into the other six categories, including fiberglass, polycarbonate, plexiglass, nylon, and acrylics.</li> <li>Recyclable: "Other" plastics are often challenging to recycle, and some may contain harmful substances like BPA. They are not commonly accepted for recycling except for certain cases like nylon.</li> <li>Please check your local recycling guidelines, as recycling capabilities can vary by location.</li> </ul>

# Metals (Aluminum and Steel)

- Recycle aluminum and steel cans.
- Rinse cans to remove any remaining content.
- Avoid recycling scrap metal or other metal items; they may require different recycling processes.

### **Electronics (E-Waste)**

- Take old electronics (e.g., computers, smartphones) to designated e-waste recycling centers.
- Do not dispose of electronics in regular trash.

#### Hazardous Materials

- Properly dispose of hazardous waste like batteries, paint, and chemicals at designated collection points.
- Never mix hazardous waste with regular recyclables or trash.
- Handling hazardous materials responsibly prevents environmental contamination and health risks.

#### **Bulky Items**

• Arrange for the proper disposal or recycling of large items like furniture or appliances through waste management services.

ANNEXES

# II. Annex I: Building Administration

# Building Administration

Before commencing the recycling program, it is important to ensure that the recycling system to be established follows any building regulations or policies related to waste management and recycling.

<b>Building Deta</b>	Building Details					
Building name:						
Building address	:					
Admin name:						
Contact	Mobile:					
Information	Landline:					
	Email:					
Building Info	rmation					
<ol> <li>Do you agree recycling system building prese</li> </ol>	ee to establish a stem within the mises?					
2. Do you have conditions for	e any specific or its implementat	on?				
3. To oversee each office i a coordinate building's "C ensure effec coordination meetings wi progress. De	the recycling syste s required to desig or as part of the Green Team," to tive collaboration n. Periodic follow II be held to assess o you agree?	n, hate nd				
4. Regarding the management building	ne current waste t system within th					
a. Who collectir offices?	is responsible og waste from	for the				
b. Is there room in	a designated gai the building?	bage				
c. Who is collectic storage	responsible for von from the area, and do you	aste final nave				

Bu	ilding Information	
	a waste management service provider?	
	d. Is there available space to add recyclable waste bins if required?	
5.	How many offices are there in the building, and how many are currently occupied?	
6.	Please provide the contact information for each office.	
7.	Please note that a fundamental requirement for the operation of this recycling system is to establish a contract or agreement with a recycling service provider or collector, which should be managed through the building or facility management. Your administration will oversee this agreement. Do you have any comments or concerns?	

Name: Signature: Date:

# 12. Annex 2: Office Data Collection

# Office data collection

In partnership with the building administration, we are launching a recycling system. To streamline this effort, we kindly request your responses to the following questions. Your input is crucial for collecting data from your office, which will be analyzed to attain a comprehensive understanding of waste generation and the necessary resources.

Compa	ny De	tails				
Company name:						
Office no. / floor:						
Company Phone no:		Phone no:				
Contact	info	Email:				
Type of :	activity	•				
Number	of offic	ce-based				
employe	es:					
Focal pe	rsonal	Name:				
info		Phone no:				
		Email:				
C:4	• • • •					
Situati	on An	lalysis				
I. If yo	ur offic	e does not current	y implement recycling practices, would			
you	be ope	n to participating in	the building's recycling scheme?			
Z. Have	e you a	iready established a	recycling system within your office?			
<b>3.</b> If yo	If your office already practices recycling, please provide the following					
deta	details:					
a. \	Who is					
b. `	b. What types of waste are you currently sorting?					
с.	c. How many recycling bins do you have?					
d. I	d. How frequently are your recyclables collected?					
<b>4.</b> Who	4. Who is responsible for waste collection in your office, and could you					
pleas	please share their contact information?					
5. Cou	. Could you estimate the current daily waste generation from your					
offic	office? How many waste bags do you generate, and what sizes are					
they	they?					
<b>6.</b> Are	Are your staff members well-informed about proper recycling					
prac	practices, including what to recycle and how to do it correctly?					
<b>7.</b> If no	• If not, what specific tools or resources do you require to improve					
awar	awareness and adherence to recycling practices?					
8. To e	. To ensure the effective monitoring of the recycling system, each office					
is en	is encouraged to appoint a coordinator and establish a recycling t					
ofter	n refer	red to as the "Gi	reen Team" in the building. Periodic			
meetings will be organized to assess			assess progress. Kindly provide the			
cont	contact information for your designated coordinator.					

Name: Signature: Date:

# I3. Annex 3: Building Summary

Office Name	Office number and floor	Focal point (Name/contact number)	Willingness to participate in the recycling system ( $\checkmark$ , ×)	Number of employees in office	Estimated waste generation. (kg/ day)	Already implementing recycling practices. $(\checkmark, \times)$

# 14. Annex 4: Bins Quantities and Volumes Calculations

# 14.1 In the Office

If you require further clarification on how to determine the capacity of recycling bins required for your office or workplace, please consider the following steps:

# CALCULATE THE TOTAL WASTE VOLUME:

Begin by measuring the overall volume of waste generated on a daily or weekly basis in your workplace. This can be accomplished by either estimating the current waste container sizes and collection frequency or by approximating the daily waste generation volume per employee.

The standard waste generation rate per employee in an office daily is 0.562 Kg/day. To calculate the total daily waste generated by the office, take into account the number of employees working in the office.

For example, if your office hosts 20 employees, the estimated daily waste generation would be 20 x 0.562 = 11.24 Kg/day.

# SELECT THE WASTE TYPES TO BE SEPARATED AT SOURCE (SAS):

Waste streams in the Jordanian market that have market value and can be recycled for a second life primarily include the following types:

- Paper Waste accounts for 50% of recyclable material found in office waste.
- Plastic Waste accounts for 20% of recyclable material found in office waste.
- Metal Waste accounts for 2% of recyclable material found in office waste.

Focusing on these specific waste categories within your office can promote the adoption of Separation At Source (SAS) practices. You can calculate the volumes of each waste type by converting the previously determined waste generation from weight to volume using the typical waste density of 100 Kg/m<sup>3</sup> and then calculating the volume of each waste type by multiplying it by the waste fraction percentage (%). The following example illustrates the steps to accomplish this.

Estimated daily waste generated by 20 employees	0.562 × 20 = 11.24 Kg/day		
Waste density <sup>2</sup>	100 Kg/m3		
Waste volume (m3)	11.24 ÷ 100 = 0.1124 m³/day	Volume = Weight ÷ Density $m^3 = Kg \times \frac{m^3}{Kg}$	
Waste volume (L)	0.1124 × 1000 =112.4 L/day	I cubic meter =1000 liter	

<sup>&</sup>lt;sup>2</sup> This estimate is based on the normal conditions "loose/not compacted" of typical mixed waste in commercial offices in Amman.

Waste Type	Percentage (%)	Formula	Volume (L)/ day	Volume to be sorted (L)/day
Paper Waste	50%	= 112.4 × 50%	56.2 L	47.8
Plastic Waste	20%	= 112.4 × 20%	22.5 L	19.1
Organic Waste	7.5%	= 112.4 × 7.5%	8.4 L	7.2
Electronic Waste (E-Waste)	3.5%	= 112.4 × 3.5%	3.9 L	3.3
Metal Waste	2.0%	= 112.4 × 2.0%	2.2 L	1.9
Hazardous Waste	0.5%	= 112.4 × 0.5%	0.6 L	0.5
Others	16.5%	=112.4 ×16.5%	18.5 L	16.2

## ESTIMATE THE VOLUMES AND NUMBERS OF THE RECYCLING BINS:

Now that you have volume data for each waste type, you can estimate the size and quantity of recycling bins required. Your choice of bin size should be based on the waste volumes and the frequency of recyclables collection. Collaboration with your office cleaning staff, building administration, and Recycling Service Provider (RSP) is crucial in this decision-making process. The assumptions made about how often recyclable materials are collected play a central role in designing an effective scheme. For example, if you assume that the RSP will collect these materials weekly, and your office will transfer them to a shared container weekly as well before collection, then the volumes must be calculated based on the storage duration. The following table shows how the volumes will change based on the transfer frequency from the office to the central collection storage:

Waste Type	Percentage (%)	Volume generated	Days of	Volumes to be stored
		daily (L)	storing	(L)
Paper Waste	50%	47.8	7	47.8×7 =334.39
Plastic Waste	20%	19.1	7	19.1×7 =133.76
Metal Waste	2.0%	1.9	7	1.9×7 =13.38
Hazardous Waste	0.5%	0.5	6 months	0.5×132= 63.06
			(132 days)	

Bins are available in a range of sizes and shapes, allowing you to select multiple sizes to meet your needs based on the generated waste volumes. Typical bin sizes include:

Type of Bin	Dimensions
60-Liter Bin	H68 x W39 x D30 cm
80-Litre Bin	H84 x W45 x D48 cm
120-Litre Bin	H93 x W48 x D55 cm
140-Litre Bin	H106 x W48 x D55 cm
240-Litre Bin	H107 x W58 x D74 cm
360-Litre Bin	H112 x W60 x D88 cm
500-Litre Bin	H114 x W136 x D66 cm
660-Litre Bin	HI2I x WI37 x D78 cm
770-Litre Bin	HI37 x WI37 x D78 cm
I 100-Litre Bin	HI39 x WI37 X DI18 cm

Bins may be found either as separate units or as a part of joined systems in various sizes and shapes. Smaller bin sizes, such as 60 L per bin, are also available. It's important to provide clear labeling on each bin, indicating the type of waste it should contain. Implementing a color-coding system for the bins can further simplify the process for employees to identify and use the correct bin.



#### THE FORMULA FOR CALCULATING THE NUMBER OF CONTAINERS OR BINS NEEDED IS:

Number of Containers/Bins = Total volume generated per a specific period ÷ Volume of Storage Container/Bin

Using the example provided, if you need a container to hold the amount of paper waste generated in seven days, which is approximately 334 liters, and you opt for an 80 L container that fits your available space best, then you would require  $334 \div 80 = 4.2$ , which is approximately 4 bins with a size of 80 liters. Depending on your office layout, you may consider various options such as using three 120-liter stationary bins or six 60-liter bins distributed throughout the workplace, both of which are suitable choices for storing paper.

For other waste types, you may consider using two recycling bins with two open apertures for plastics and metal with volumes of 60 liters for each aperture.

Certainly, if the frequency of transferring recyclables is lower, and the storage days are longer, you will need larger bin sizes and a greater quantity to accommodate the waste generated during that extended period. The choice of bin sizes and quantities should be adjusted based on your specific waste management needs and operational considerations.

Consult with your **RSP** and building administration to determine the most suitable bin sizes and collection frequencies based on your specific needs and circumstances.

# 14.2 In the Building

In the building, selecting the right bin size for the central collection station depends on various factors, including the number of offices in the building, the amount of recyclable waste each office generates, and the frequency of collection by the RSP. Let's illustrate this with an example:

- Suppose the RSP collects recyclables daily, and each office produces approximately 70 liters of recyclables. If there are 5 offices in the building, the total daily recyclable waste is 70 liters x 5 offices = 350 Liters.
- In this scenario, a single 360-liter container can effectively hold all the recyclables when collected daily. However, if the RSP only comes once a week, you need more storage capacity. For 6 working days a week, the daily volume is multiplied by 6, resulting in 350 liters x 6 days = 2100 Liters.
- This means you'll need either two 1100-liter bins or three 770-liter bins for recyclable collection. The choice of bin sizes depends on what aligns best with your recycling needs and the collection frequency.

The selected bin sizes should ensure that recyclables can be stored adequately until collection occurs without causing overflow or disruption in the recycling process.

# **15.** Annex 5: Environmentally Friendly Events

#### HOW TO HOST ENVIRONMENTALLY FRIENDLY EVENTS?

Evaluation Checklist – September 2023

### LOGISTICS: PRE-ACTIVITY PLANNING

- Digital Registration Forms: Convert registration forms to digital format using an online system.
- Sustainable Event Introduction: Familiarize attendees with the concept of sustainable events.
- RSVP Confirmation: Require participants to RSVP and confirm attendance via email.
- Sustainable Communication: Utilize sustainable communication channels like email and social media for file distribution.
- Printing Priority: Prioritize black and white printing; minimize colored printing.
- Sustainability Mention: During the venue's opening speech, briefly discuss sustainable event practices and allow time for the sustainability team to inform participants about sustainability requirements.
- Press Release: Prepare a press release highlighting the event's sustainable practices and distribute it to various media outlets.
- Sustainable Procurement: Give top priority to sustainable options when procuring equipment and commodities.
- Digital Materials: Provide event materials on CDs, flash drives, or as downloadable versions on social media instead of using printed materials.

## ARRANGEMENTS DURING THE EVENT

- □ Material Distribution: When there is a need to distribute materials, use reusable envelopes (e.g., recycled paper envelopes or cloth/plastic reusable bags).
- □ Waste Reduction Reminder: Remind participants of the importance of waste reduction in the welcome speech, throughout the event, and on signs on the recycling bins.
- □ Waste Containers: Prepare containers of the right size and shape to hold the expected amount and type of waste (paper, glass bottles, metal cans, and organic waste).
- □ Visual Aids: Use whiteboards and PowerPoint presentations instead of flip charts and other boards.
- Selective Material Distribution: Give booklets and other printed materials to interested beneficiaries instead of distributing them randomly.
- Documentation and Recordkeeping: Record sustainable practices and activities (using pictures, videos, documents, etc.) for future awareness, training, and events. Also, collect success stories and lessons learned.

#### **CATERING SERVICES**

- Accurate Participant Count: Catering must have the exact count of participants to ensure zero food waste. Periodically check the count throughout the event's activities.
- Reusable Tableware: All plates, cups, cutlery, cup lids, and coasters must be reusable. Items made of paper, polyester, and single-use plastic are prohibited.
- □ Multiple-Serving Jugs: Use proper-sized multiple-serving jugs instead of small cans or bottles to serve water and other drinks.
- □ No Single Portions: Follow the "no single portion" rule. Avoid individual sugar, milk, spice, artificial sweetener, and ketchup packets; use bowls or containers that can serve multiple people.
- Excess Food Donation: The venue should consider donating excess edible food to local charities rather than disposing of it.

#### SUSTAINABLE PROCUREMENT

- Necessary and Conscious Purchases: Purchase only the necessary products that are both environmentally and health-conscious, ensuring they are appropriate for the number of participants.
- Environmental Considerations: Always prioritize the environmentally friendly option when procuring products and foods, taking into account their carbon and water footprints.

#### WASTE MANAGEMENT DURING THE EVENT

Proximity of Recycling Bins: Place recycling bins of the appropriate size in close proximity to waste generation activities to collect paper, plastic, and metal waste.

#### **PROCEDURES AFTER THE EVENT**

- Badge Collection for Reuse: Place a basket with a sign to collect badges for reuse at other events.
- Electronic Feedback: Collect complaints or suggestions via email or phone to reduce paper waste.
- Digital Evaluation Forms: Use digital feedback forms to ask participants to evaluate the sustainability procedures implemented throughout the event.
- Comprehensive Impact Report: Prepare a quantitative, detailed report assessing the event's environmental, economic, and social impacts. Include recommendations on how to improve future events.
- Continuous Improvement: Evaluate, improve, and amend sustainable procedures to meet the needs of the participants and further reduce the environmental, social, and economic impact.

# 16. Annex 6: Separation at Source (SAS) Poster

These posters can be displayed above disposal areas and separating bins as a guidance of what can/cannot be recycled. Posters can be found on the following URL: <u>https://qrl.be/4HSV</u>.





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