

## “Recycling from the source policy for Business activities in municipalities”

The sponsor	The Ministry of Local Government
The beneficiary	The municipalities of central Tripoli- Benghazi- Sebha- Al-Zintan- Jadu- Dernah- Wadi Etbah- Batin Al-Jabal- Nalut
The project’s fundraiser	TAMSALL’S project - EU
Local implementing partner	OTR for Consultancy & Training

No	Subject	Page number
1.	First: Introduction	1
2.	Second: The General Frame of the Waste Sorting Process in Municipalities	2
3.	Third: Definitions and Terms	5
4.	Fourth: The Purpose of the Policy	7
5.	Fifth: Boundaries of Applying the Policy	8
6.	Sixth: Assessing and Amending the Policy	8
7.	Seventh: The Responsibilities Towards the Policy	8
8.	Eighth: The Policy's Regulations	10
9.	Ninth: The Data and Information from the Partner Municipalities	11
10.	Tenth: Rules and Instructions	11
11.	A. The phasing policy in recycling	1-11
12.	B. Issuing a hanged certificate for restaurants and café owners	2-11
13.	C. Motivating the private sector	3-11
14.	D. The policy of the municipality on issuing the tax decree for cleaning fees	4-11

**First: Introduction**

Environmental issues pose an absolute explicit challenge to urban communities, given their increased rates of generation as a direct result of high population numbers and the diversity of economic activities, as well as the complexities that arise through the introduction of many elements in life system to ensure that people's needs and desires continue to be met and in line with the concepts of sustainable development, especially as they contain materials whose economic value can be recovered by recycling them as well as reducing the burden of collection and transportation of waste, which has become costly to the public treasury, where the waste is first transferred to the stage dumps and then to the final dump, Not to mention environmental pollution that may result from hazardous substances igniting landfills causing disease and environmental pollution that will have a negative impact on the population.

The world is currently living on a so-called "circular economy" model with a state of transparency and increased confidence across global supply chains that stimulates greater control of resources. Some economies have circular supply chains through which profits are shared fairly among municipalities, business and economic actors, and others.

Therefore, in line with Local Revenue Regulation No. 330 of 2021 and believing in the need to create stimulus policies that will be the effective performance of change by communicating with all relevant bodies on the one hand and on the other hand applying the principle of multi-level governance based on which partner municipalities have established a working group consisting of technical departments of the Ministry of Local Government and municipal technical departments and a representative private sector company engaged in screening from the source and some civil society organizations such as Oxygen Society, Scouting Commission, and the February newspaper to follow up and publish the initiative to other municipalities.

Based on the foregoing, partner municipalities have adopted an optimal environmental and technical policy to incentivize economic entrepreneurs to contract with a specialized company to recycle from the source that takes into account environmental standards and requirements and exploit and recover

the economic value of those materials to complete their life cycle without any adverse effects and according to the so-called revolving economy. (green or circular economy), where the owner of the activity will be granted a hanged certificate (Certificate of collection of used cooking oils) Also, cleaning fee reduction privileges will be granted to any business that conducts source sorting and safe waste disposal by delivering them to the recycling company, thereby ensuring the municipality's sustainability in the recycling process.

### Second: the general frame of the waste sorting process in municipalities

#### First/ waste source, its qualitative composition, and its production rates

Waste sources, their qualitative composition, and their production rate should be identified and classified by municipalities according to the following:

##### B. Waste sources:

##### 1. Municipal Solid (business and domestic) Waste [SW]:

- Neighbourhoods' waste
- Educational Facilities' waste
- Business Activities' (public markets, butcher shops, vegetable shops, restaurants and cafes, bakeries, clothes & shoe stores) Waste
- Places which their waste source tends to be boxes and paper (clothes, shoes, home & electric appliances, hardware, toys & stationery)
- Administrative institutions' Waste such as banks, civil registry offices, and administrative offices of ministries and governmental authorities

##### 2. Industrial and Craftwork Waste:

- Crafts workshops (Car Mechanics, Carpentry, Blacksmithing, Plastic & Aluminium Production, and Glass Installation) Waste
- Tires & Batteries Instalment and Maintenance shops Waste
- Refrigerants Maintenance (Air conditioning and Cooling) Shops Waste
- Sponge, Furnishing, and Curtains factories and shops and Tailors' shops Waste
- Electronic devices maintenance centers Waste [EW]
- Cars' Scrap Warehouses Waste
- Food Factories Waste

Second/ The responsibilities, tasks, and duties related to the recycling and sorting of waste from business and service-providing activities:

**A. The responsibilities and tasks of the Ministry of Local Government:**

1. The Ministry of local government shall guide the municipalities to assign to their offices competent in Solid Waste Management (General Cleaning) and Environmental Sanitation administrations in coordination with the branches of the Ministry of Environment, the Economic Sector, and the Industry Sector in the areas. Each municipality shall carry out this responsibility as follows:
  - Taking the necessary measures by applying the principle that entails the person causing pollution to pay in contribution to decrease the general spending and that in coordination with the executive controlling authorities (The Municipal Guard, Agricultural Police Office, Environmental Police office).
  - Giving investors space and encouraging them by applying the joint funding of projects with the private sector for the recycling centers and factories projects to sort and select (Fertilizers, Plastic, Boxes, Paper) waste. Priority of funding shall be considered for the local private sector in coordination with the investment authorities from banks to local investment institutions.
  - Determining the number of waste collection points and sorting boxes and their colors according to the mapping, itinerary, and numbering of points to facilitate the collection and sorting processes.
  - Setting a timetable to collect the sorted waste with the assigned and contracted authority and in partnership with one of the investors.
  - Setting up an effective informative and guiding plan through the media office in the municipality by employing schools, clubs, mosques' podiums, and public figures to encourage serious contribution (community participation) from citizens and creating competition by offering an annual prize for the best locality, school, street, and hospital in coordination with civil society organizations.
  - Periodically following up and binding the major public and private facilities such as hospitals, universities, hotels, military encampments, and headquarters, resorts, and markets on the necessity of applying the sorting policies. This is to be accomplished by providing sorting containers per the policy and abiding their usage.
  - Taking countermeasures against violators by forcing monetary fines and other legal actions such as warnings and suspension of business through the municipal guard and agricultural police force and in accordance with the laws and regulations in force.

**2. Municipalities shall work in coordination with the planning, economic, and industrial sectors to:**

- Issuing a list of fees determined by the size of the business activity, the quality and quantity of the waste it produces, and the extent of its impact on health and the environment.
- Determining the prices of the fees (for hygienic and environmental damage) posed from failing to abide by the policy, especially for the facilities that produce dangerous waste and the suppliers of goods and that by controls and conditions in this regard.
- Taking practical measures to facilitate procedures and support and encourage investment by potential tax and custom exemption scores and by granting loans for supplying the equipment and material used for sorting and recycling.
- The industry sector shall be responsible for organizing, licensing, and providing logistic support to the waste recycling industry by granting loans and accommodations in coordination with the financial and economic sectors.

**B. The responsibilities and tasks of the citizens:**

- Cooperating with the municipal authority and abiding by their instructions regarding the produced waste sorting process (sorting from the source).
- Separating the sorted waste into color-designated containers and instructing others to do so.
- Delivering expired medicine waste to the nearest medical facility.
- Placing old clothes and shoes in their designated boxes (in the locality).
- Collecting used frying oil in a firmly sealed bottle and placing it in its designated container.
- Adhering to transferring buildings and demolishing waste firsthand through a designated transporter to avoid leaving them to accumulate on the streets.
- Adhering to take out durable goods waste according to the municipality's timetable.
- Aiding children and the elderly in the sorting and separating process.

**1. The duties of business, service, and craft activities owners:**

To adhere to the following:

1. Restaurants, cafes, and hotels are to sort their waste in provided three containers and a basket (organic waste, beverage cans, plastic containers, and paper and boxes basket).
2. Butchers are to provide a container and a basket (a container for meat and a basket for boxes) and to preserve meat waste in a refrigerator until its collection by a designated collector.
3. Vegetable shops are to provide a container and a basket (a container for vegetable waste and a basket for boxes).
4. Fabrics, clothes, shoes, home & electric appliances, and stationery stores are to provide containers for boxes and nylon.

5. Major markets that include restaurants, cafes, and butchers shall provide four containers and a basket (one for organic waste, one for plastic, one for beverage bottles, one for meat waste, and a basket for boxes and nylon).
6. Air conditioners, refrigerators, electronic devices maintenance shops and different workshops shall provide baskets for their waste.
7. Car oil changing stations shall provide barrels to collect used oil and a container to collect empty oil bottles.

### ■ Final Definitions & Terms

---

1. **The municipality**: it is a local administration unit which aims to provide services for the citizens.
2. **The partner municipalities**: Benghazi- Central Tripoli- Sebha- Al-Zintan- Batin Al-Jabal- Jadu- Wadi Etbah- Derna- Nalut.
3. **The municipal fee**: a constant or relative monetary deduction paid by the mandate from using a service or receiving a permit from the municipal authority for personal interest besides a public one.
4. **Collecting and transferring the sorted waste**: it is the process of collecting the solid and liquid waste that has been sorted (Waste), from stores and other public and private facilities. It does not include dangerous types of waste (medical, radioactive, petroleum waste, etc.), and the waste is collected according to a timetable that conforms to the nature of streets and neighborhoods.
5. **Field supervision**: a necessary technical process of daily and weekly field coordination, supervision, and follow-up to ensure the implementation of the waste sorting process from the source (stores) and delivering it to the contractor to transfer and recycle.
6. **Oil trap**: a designated geometrically designed unit used to separate oil and metal grease from wastewater that comes from car cleaning and lubricating stations.
7. **Grease trap**: a designated geometrically designed unit used in internal sewage extensions in business kitchens, restaurants, food factories, hotels, etc., it works on separating oil and food grease from liquid waste before it gets drained in the public sewage or septic tanks.
8. **Waste sorting and selection centers**: factories that manually or automatically sort and select waste components to separate and then channel to recycling factories. The benefit from such centres comes from the statistics that are placed between the sorted and collected waste and the rejected waste (data base).
9. **Reuse**: using materials used by the consumer before instead of throwing them away as waste more than once by regular reuse of the same material for the same purpose.
10. **Recycling**: a process where produced waste is benefited from and used to produce new products. Thus it is a process where used material is collected and transformed into raw material which is produced to be consumable again, which contributes to less power consumption and less pollution.
11. **Sorting and collecting waste**: it is the process where each type of material is selected separately. The process starts with the consumer who collects his litter by separating it and throwing it in the sorting and selection containers in his area, through doing this he can help preserve the environment by decreasing pollution, lessening the effort of the workers in the sorting centers, and lowering the costs.



12. **Separation containers (sorting)**: containers that are designated to the sorted waste, and the color of each container is associated with its type of waste known in the municipality or area. The container also carries a sticker or an illustration to further facilitate the sorting process for the citizens.
13. **Sorted waste collectors**: a person/ company/ organization with which the area's administration (the municipality) concluded an agreement (contract/ agreement) to collect the sorted waste from the containers according to a timeline that ensures that it doesn't pile up outside the designated containers and baskets.
14. **Investment in waste recycling**: Investment in micro or macro projects by a private/public sector investor, through which sustainable spatial development is reflected to preserve the environment, and create job opportunities for the residents in the area, alongside the material return and profit.

### Third: The purpose from the policy:

The purpose of this policy is to safely dispose of the dangerous negative impact of waste by spurring the interest of all the restaurants and cafes to correct safe environmental practices starting from sorting plastic waste, oil, recycling and reusing, encouraging participation, providing instructions for a successful application of the recycling system, encouraging recycling companies to contract stores, restaurants, and cafes, to sort plastic waste and oils for payment according to controls and requirements placed by the municipality to ensure the removal and reuse of waste in the municipality.

The purpose of the whole policy can be summarized in:

1. Protecting the environment from the pollution that results from the bad management of waste.
2. Protecting humans and animals' health.
3. Protecting water sewages from the unsafe disposal of oils.
4. Decreasing the general spending on collecting, transferring, removing, and processing waste.
5. Achieving sustainable development goals.



6. Economic returns (circular economy) from new markets and new job opportunities by investing in produced waste.





#### Fifth: Boundaries of applying

All the stores, restaurants, and cafes that are in a contract with companies that collect, sort, and recycle waste under the municipalities' supervision.

#### Sixth: Assessing and amending the policy:

1. The policy shall be periodically assessed in an organized manner by the relevant administrations and offices to ensure that the partner municipalities are able to effectively achieve their goals.
2. The partner municipalities work on periodically improving the policy to ensure constant development and improvement.

#### Seventh: The responsibilities towards the policy:

The municipality establishes a policy of encouragement according to a mechanism through the sorted waste collectors by giving business activity owners an incentive of a green card through periodic follow-up. Other suggested incentives (such as decreasing the cleaning fee cost) can also be implemented under the concepts of sustained development and community participation by distributing the tasks and responsibilities as follows:

No	The authority	The required procedure
1.	Ministry of the local government	Circulating the policy
2.	The municipal council	Issuing the tax decision+ the policy accreditation decision
3.	The mayor	Present the policy to the council
4.	Deputy of the municipality office	Review and follow up with the policy's implementation
5.	Head of the general administration of environmental sanitation in the ministry of local government	Review and provide technical support

6.	Head of the cleaning administration in the ministry of local government	Review and provide technical support
7	Administrations of local revenue in the Ministry of local government	<ol style="list-style-type: none"> <li>1. Reviewing the proposed revenue and referring it to the minister of local government.</li> <li>2. Ensuring that there is an attached copy of the hanged certificate (the green card) when collecting the cleaning fee</li> <li>3. Lowering the cleaning fee costs for the targeted restaurants and cafes by 20% according to the municipal council's decree</li> </ol>
8	The team formed under the deputy of the municipality's office decree	Preparing, reviewing, and implementing the policy
9	Administrations of environmental sanitation affairs in the partner municipalities	<ol style="list-style-type: none"> <li>1. Reviewing and applying the policy and ensuring to take all the implementation and technical procedures under the policy</li> <li>2. Designing and printing a green card (which states that the restaurant or cafe is under the municipality's control and that it's environmentally friendly).</li> <li>3. The periodic inspection of the signed restaurants and cafes</li> <li>4. Giving a hanged certificate (green card) for adhering restaurants and cafes</li> </ol>
10	Administration of general cleaning in the partner municipalities	<ol style="list-style-type: none"> <li>1. Opening the matter and classifying the business activities that adhere to periodically collecting data and information</li> <li>2. Lowering the cost of the cleaning fee by 20%</li> <li>3. Attaching a copy of the certificate to the administration of local revenue when collecting</li> <li>4. Proposing motivating annual programs such as honoring the activity owner that adheres to the waste sorting process the most.</li> </ol>
11	The administrations of local revenue in the partner municipalities	Proposing new sources of revenue ( the hanged certificate, used cooking oil collection certificate)+ taking cleaning fee

		collection procedures+ issuing the relevant reports
12	Legal offices in the partner municipalities	<ol style="list-style-type: none"> <li>1. Preparing the minutes of the agreement between the municipality and the waste collectors who will collect it and transfer it in agreement with the targeted activities owners.</li> <li>2. Preparing the contract forms between the collectors and the activity owners.</li> </ol>
13	The municipal guard office in partner municipalities	Detecting violations in accordance with the law.
14	The administration of general cleaning in the partner municipalities	Continuing to apply the policy and prepare the necessary reports
15	The sorted waste collectors company from restaurants and cafes (the contractor)	Preparing the agreement/contract with the restaurants + collecting and recycling the sorted waste
16	Oil collecting companies from restaurants (the contractor)	Preparing the agreement/contract with the restaurants + collecting and recycling the sorted waste
17	Business activity owners (the restaurants and cafes that in contract with the contractor)	Signing the agreement+ sorting waste+ collecting used cooking oil

### Eighth: the policy's regulations:

**First:** Act No. 59 on Local Administration and its implementing regulation.

**Second:** The Health Act No. 106 of 1973 and its implementing regulation.

**Third:** Act No. 15 of 2003 on Protecting and Improving the Environment and its implementing regulation.

**Fourth:** Act No.13 of 1984 on The General Cleaning Provisions and its implementing regulation.

**Fifth:** The Local Revenue System Regulations No. 330 of 2021.

**Sixth:** The Minister of the Local Government's Decree No. 1500 of 2021 on The Unified Organizational Structure for Municipalities.

### Ninth: The data and information of the partner municipalities

A comparison based on many studies of the qualitative composition of waste among the municipalities of central Tripoli, Benghazi, and Ghidames.

Waste components	The components ratio							
	US	France	Sweden	Cairo	Riyadh	Tripoli	Benghazi	Ghidames
Organic	22.5	24	12	59.5	50.5	59.70	42.5	62
Paper	42	29.6	55	15.75	18.6	11.48	12.5	10
Metal	8	4.2	6	1.9	2.7	5.45	9.45	15
Glass	6	3.5	15	1.8	2.9	2.73	2.40	2
Plastic						10.74	2.27	9

Based on the data reported by the Solid Waste Administration under the Ministry of the Local Government (The quantity and the rate of the plastic and boxes sorting and recycling process)

Name of Municipality	Population	Population in 2022 based on the accredited	the rate of daily solid waste produced (1.2 Kg)	the amount of solid waste produced (Ton/Day)	the daily amount of plastic produced (Ton/Day)	the financial returns from collecting plastic	The daily amount of boxes produced (Ton/Day)	the financial returns from collecting boxes
	According to the detailed questionnaire of the service							

	in the area by population	increase rate				(Libyan Dinar/ Day)		(Libyan Dinar/ Day)
Central Tripoli	208.000	285292 نسمة	1.2	342.35	58.2	43650	27.4	6.8
Nalut	21000	21397 نسمة	1.2	25.68	4.4	3274	2.1	0.5
Batin Al-Jabal	نسمة 25308	نسمة 25786	1.2	30.37	5.2	3872	2.4	0.6
Jadu	نسمة 13918	نسمة 14181	1.2	16.70	2.8	2129	1.3	0.3
Al-Zintan	نسمة 33108	نسمة 33734	1.2	39.73	6.8	5066	3.2	0.8
Benghazi	نسمة 732114	745951 نسمة	1.2	895.14	152.2	114130	71.6	17.9
Dernah	-----	-----	-----	-----	-----	-----	-----	-----
Sebha	نسمة 149042	151859 نسمة	1.2	182.23	31.0	23234	14.6	3.6
Bint Beh	نسمة 4132	نسمة 4210	1.2	4.96	0.8	632	0.4	0.1

### Tenth: Rules and Instructions

#### A. The phasing policy in recycling:

As a result of the recent experience in waste recycling, which includes household waste, industrial, business, oil, health and other activities, a gradual process needs to be incorporated into sectors or targets through the use of innovative stimulus methods. For example, the Ministry of Local Government and Municipalities aimed at collecting cleaning fees from economic activities and did not target homes, causing no incentive that could be used at this stage, particularly for weak legislation supporting waste separation and recycling.

Restaurants and cafes in municipalities are the most economical activities produced in plastic waste that increases collection and transportation costs, as well as have a negative impact on the phased and final landfills when incineration occurs. (incineration), and used oils are often disposed of by sewage channels without adherence to the use of the trap, causing a blockage in sewage channels, resulting in increased costs of periodic and emergency maintenance as well as cans of soft drinks and paperwork that are of unavailable financial value and need to be reorganized.

Based on the foregoing the partner municipalities have always accredited the following phasing:

- The first phase (trial):** restaurants and cafes.
- The second phase:** all the business activities within the spatial domain in the municipality.



c) **The third phase:** houses and public institutions.

**To ensure the successful application of the policy the following procedures should be applied:**

1. Identifying the business activities and the type of waste they produce so the number and color of their sorting containers can also be identified according to the aforementioned phasing. By identifying a number of activities in the initial stage then the others activities in the other stages.
2. Limiting the number of business activities and their sizes (the more in number) and locating them in every locality (through the Geographical Information System GIS department) to identify the routes for the waste sorting results.
3. Identifying the significance of waste from an economic perspective (valuing it) and from an environmental perspective by the ability to recycle it and identify the most dangerous types of waste on the environment.
4. Contacting investors on their receptive field and according to their activities regarding recycling programs to determine the methods of partnership (contracts/ agreements/ direct assignment/ contribution) and drafting the terms according to the form of agreement between the two parties (the municipality and the investor) which will clarify the responsibilities and tasks of them both.
5. Creating mechanisms (green participation to protect and improve the environment), that encourage business activity owners to adhere to the waste collection process and contact the investors.

**B. The restaurants and cafes encouraging policy:**

Municipalities place an implementation plan to apply the sorting and recycling policy with business, service, and craft activities according to the concepts and objectives of the Green circular economy and sustainability through: The experience of municipalities abroad in enacting and encouraging business activity owners to adhere to the sorting process, especially in the countries located in the Mediterranean which are as follows:

**Identifying the waste targeted from sorting by the common economical activities in the domain of the partner municipalities:**

1. The most economical plastic waste is based on its quantity and the number of operators recycling it, as well as the international encouragement to recycle plastic to protect the environment and the ocean.
2. Paper and box waste.
3. Metal can (drinks cans and so on).
4. Vegetable cooking oils waste.

**First: Plastic Waste:**

One of the most important types of waste that should be treated for many economic and environmental reasons most important of which are:

**1. The need to recycle plastic:**

Plastic as a material is solid, light in weight, and cheap in cost. Therefore it is easy to shape into different products and used for many things, and that's why plastic production increased in the last couple of decades and even more the reason to prevent the damage it causes to environmental elements (land, sea, and air) when it burns or dissolves.

**2. The many types of plastic:**

According to the plastic production lines, there are seven types of plastic (labeled from 1 to 7 on the recycling logo on the lower back part of plastic bottles). The following illustrates types of plastic and the important plastic waste found in the solid waste in Libyan municipalities:



LDPE

### آمن نسبياً وقابل للتدوير

لا يسبب انتقال مسببات السرطان والسرطان عند تعرضه لدرجة حرارة عالية من 70 C أو أقل أو لدرجة حرارة من -9 C. يستخدم لصنع علب القوارير، أكياس التسديش



V

### ضار وسام إذا استخدم لفترة طويلة

وجودها في درجة حرارة عالية يحولها إلى مصدر لمواد كيميائية مسرطنة يستخدم في مواسير السباكة وستائر الحمام والشرايط الكهربائية والاتصالات، بالإضافة إلى لعب الأطفال وتغطية اللحوم والأجبان (كبلستيك شفاف)



HDPE

### آمن وقابل للتدوير

مادة عالية الكثافة، وهي لا تنقل أي مواد كيميائية إلى المواد الغذائية المعبأة بها وذلك ضمن درجة الحرارة العادية يستخدم في صناعة علب الشامبو، المنظفات، الصابون، قوارير الحليب، ولعب الأطفال



PETE

### آمن وقابل للتدوير

إذا تعرض لدرجة حرارة عالية أي 70° او الى التبريد المنخفض أي 9°- يصبح غير صحي وسام مما يسبب أمراضاً سرطانية. يستخدم في القوارير البلاستيكية للمياه المعدنية



OTHER

قد يكون هذا النوع عبارة عن خليط من المواد البلاستيكية المختلفة، والأمر الهام أن كثير من الشركات العالمية بدأت تتجنبه. ينصح بتجنب هذه المادة قدر الإمكان، إلا إذا ذكر عليها أنها خالية من مادة BPA تصنع منه الألعاب، ورضعات الأطفال



PS

### خطر وغير آمن

قد ينقل مواد مسرطنة من البلاستيك للأطعمة والمشروبات. يستخدم في علب الوجبات السريعة، وأكواب الشاي المصنوعة من مادة الفلين



PP

### الأفضل والأكثر أماناً

يتناسب السوائل والمواد الباردة والحرارة وهو غير ضار أبداً. لا يسبب انتقال مواد كيميائية للأطعمة ضمن درجة الحرارة العادية. يستخدم في علب الأدوية وكل ما يتعلق بالطعام (حوافظ الطعام والصحون ...)



**Second: Paper and Boxes Waste:**

When it comes to investing in recycling and waste production programs, recycling paper and boxes that are produced from public and private institutions activities is a vital and indispensable process. Such materials are directly and locally available to sell to investors once the required processes of organizing the collecting containers and times of collecting and transferring the waste to recycling factories that will recycle it and send it in turn to paper and boxes companies to reproduce and sell in the local market in the municipalities and the surrounding Arab markets. The latter process will provide hard currency by lowering paper consumption rates and providing the local market with the amount of paper it requires.



**Types of paper and boxes that are recycled:**

1. **Newspapers:** light in weight, less durable, soak easily, and short-lived.
2. **Magazines:** similar to newspapers but their papers are more clear and shiny.
3. **Boxes:** consists of many layers, used to wrap different publications and to make packaging boxes.
4. **boxes:** paper that is used to wrap groceries.



**Third: metal waste (drink cans and so on):**

There two types of metal that widely entered the world of food packaging such as cans of food made of:

**1. Tinplate (iron):**

It is made of treated iron sheets after the procedure of tin (is to dress the thick homogenous sheet layer of tin with electrolytic analysis) enamel or composite varnish coating of organic materials of special qualities to prevent food ingredients from interacting with the metal of the can and the most important waste cans generated in solid waste in partner municipalities and which have economic value and are present in several large or small sizes of tomato cans/condensed milk/cans of sardine/legumes cans/oil cans/olives cans /sweets and chocolates cans/harrisa cans.

**2. Aluminium:**

Aluminium cans gain prominence due to many distinctive features, such as stackable cover, lightweight, strong, sealed, transport resistance and coarse handling The most important benefits of aluminium cans that they are highly recyclable. Approximately 100% aluminium used in cans can be smelted and reused again. Aluminium cans can be recycled at the end of their life cycle without deteriorating their quality, making aluminium cans the type of packaging preferred for brands in various industries, before other materials as aluminium recyclability is one of the main factors affecting the consumption of aluminium cans on the market and among the most important cans found in municipal solid waste can soft drinks and juice cans.



**Fourth: Cooking oil residue:**

Used Cooking Oil is a second-hand cooking oil - Such as sunflowers, corn, cola, olives, palms, rapeseed, soy oil or animal fats, used for cooking or frying, to prepare food both in restaurants and cafes. The recycling of cooking oils means protecting the environment from pollution and achieving material gains by converting used cooking oils into a primary substance in many industries that need these oils.

Problems caused by waste oils in sewage cause fatty layers within the sewages and also cause clogging of oils with sewage affect treatment efficiency and disruption of water treatment and recycling plants

The most important products of recycling cooking oils:

- Production of biodiesel fuel (clean fuel with zero CO2 emission).
- Cleaning Products
- fertilizers.





The identifying mechanism of the waste sorting containers and their colours:

Type of activity	Color of container			
	Yellow for plastic (inside the store)	Red for metal (inside the store)	Paper and Boxes	
			Blue (inside the store)	Metal basket (outside the store)
Restaurants and cafes	☺☺	☺☺	☺	☺☺
Grocery and cleaning products stores	— — —	— — —	☺	☺
Clothes and shoes stores	— — —	— — —	☺	☺☺
House and electric appliances stores	— — —	— — —	☺	☺☺
<b>Brown for the waste of fruits and vegetables stores (organic)</b>				
<b>Major and weekly markets</b>			<b>Vegetables and fruits stores</b>	
Big green metal box for organic waste	A metal basket for boxes	Green container for organic waste	A metal basket for boxes	
☺☺	☺☺	☺☺	☺☺	
<b>Brown container for the (organic) waste for the meat poultry and fish stores</b>				
☺☺☺				

### 3. Adapting the tax decree to the cleaning fee policy to motivate the private sector:

Based on Article No. (32) of the Regulation on Local Revenue No. 330 of 2021, which stipulates that the Municipal Council shall issue the tax decree and determine the value of the fee not exceeding the upper limit set by a decree of the Minister. By doing so, partner municipalities must establish an additional classification with the same fee code when preparing the imprisonment decision for cleaning fees approved by the highest Minister of Local Government. (Code) In accordance with the Ministry's accounting manual, activities obtained from a green suspension certificate are added as such activities are sorted, which will reduce the costs of collection and transportation of waste, the costs of maintenance of sewage channels, as well as the costs of treatment of wastewater, as illustrated in the following example:

رمز الرسم	الحد الأعلى للقيمة الشهرية للرسم	اسم الإيراد المحلي	تر
100000000		الرسوم البلدية	
102000000		رسوم النظافة	
102040000		رسوم النظافة للنشطة الخدمية	
102046500	115.00	مكولات خفيفة بجميع أنواعها	294
102046600	115.00	مقهى وإطارات صيدلي	295
102046700	115.00	مقهى، شاي	296
102046800	230.00	مطعم شاي	297
102046900	460.00	مطاعم ومقاهي الدرجة الأولى	298
102047000	230.00	مطاعم ومقاهي الدرجة الثانية	299

Taking into account restaurants and cafes that have obtained a hanged certificate (which states that the restaurant or cafe is engaged in the sorting of plastic waste and the collection, sale, or delivery of used oils to the contractor) as follows:

رمز الرسم	الحد الأعلى للقينة السنوي للرسم	الحد الأعلى للقينة الشهرية للرسم	اسم الإيراد المحلي	ت.
100000000			الرسوم البلدية	
102000000			رسوم النظافة	
102040000			رسوم النظافة للأشطة الخدمية	
102046500	10,800.00	900.00	مكافآت خضمة بجميع أنواعها	294
102046500	8,100.00	675.00	مكافآت خضمة بجميع أنواعها حاصل على الشهادة المعلقة	296
102046600	10,800.00	900.00	مقهي وإفطار صيدلي	296
102046600	8,100.00	675.00	مقهي وإفطار صيدلي حاصل على الشهادة المعلقة	297
102046700	10,800.00	900.00	مقهي شطبي	298
102046700	8,100.00	675.00	مقهي شطبي حاصل على الشهادة المعلقة	299
102046800	2,280.00	190.00	مطعم شطبي	300
102046800	1,710.00	142.50	مطعم شطبي حاصل على الشهادة المعلقة	301
102046900	4,920.00	410.00	مطاعم ومقاهي الدرجة الأولى	302
102046900	3,690.00	307.50	مطاعم ومقاهي الدرجة الأولى حاصل على الشهادة المعلقة	303
102047000	2,340.00	195.00	مطاعم ومقاهي الدرجة الثانية	304
102047000	1,755.00	146.25	مطاعم ومقاهي الدرجة الثانية حاصل على الشهادة المعلقة	305