



DEVELOPING KEY PERFORMANCE INDICATORS FOR MONITORING, FOLLOW-UP, AND EVALUATION OF WASTE MANAGEMENT ACTIVITIES



2024

SwitchMed II Project (Policy Component)
to accelerate the implementation of Sustainable Consumption and Production, Circular Economy and Blue Economy

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LIST OF ACRONYMS

CAOA	Central Agency for Organization and Administration
CEDARE	Centre for Environment & Development for the Arab Region & Europe
KPIs	Key Performance Indicators
MIS	Management Information System
RBM	Results-Based Management
RDF	Refuse-Derived Fuel
SCP	Sustainable Consumption and Production
SWM	Solid Waste Management
UNEP	United Nations Environment Programme
WMRA	Waste Management Regulatory Authority

EXECUTIVE SUMMARY



This activity was executed under the EU-funded SwitchMed programme (policy component), coordinated by the United Nations Environment Programme (UNEP) and implemented in Egypt by the Ministry of Environment in collaboration with the Centre for Environment & Development for the Arab Region & Europe (CEDARE). Waste management is one of the four sectors that were selected in the Sustainable Consumption and Production National Action Plan in Egypt. It is based on an identified need by the Waste Management Regulatory Authority (WMRA) for technical support to perform its mandate in an effective way. In this regard, assistance was asked in monitoring, follow-up, and evaluation of waste management activities based on Article 7 in Law No. 202 of 2020 for Integrated Waste Management, governing its operations.

The main **aim of this activity** is to assist WMRA in fulfilling its function according to the Integrated Waste Management Law by developing key performance indicators (KPIs) that can help in monitoring and managing the waste management activities in Egypt, assisting in the transition towards a more circular economy. These KPIs will serve accountability, transparency, results-based management (RBM) and most importantly learning purposes. Having a robust results-based management system will assist WMRA in performing its mandate in a more effective and efficient way by establishing baseline and target to assess progress and challenges towards a more circular economy.

This report describes the **output** of the whole activity from its start in June 2023 up until September 2023.

Recommendations of the report were formulated in a participatory approach. The results of this exercise **will be utilized** in guiding actions and decisions to maximize the effectiveness of WMRA's operations and will serve as evidence for increased accountability and transparency.





Methodology and Output

Different methodologies were used to achieve the assignment's objectives. First, **desk research** was conducted to understand the status quo of activities and existing legislations governing WMRA's work. Second, **four consultation sessions/workshops/meetings** were conducted to collect data and produce the main **output**.

The assignment's objective was overachieved through different deliverables shared with the WMRA team.

The following are the main outputs produced:

- 1- Assigning a focal point from WMRA's side to follow up on activities.
- 2- Developing 25 KPIs for the five strategic components of WMRA's current workplan. Indicators have been categorized and assigned to each component based on discussions and agreements. Indicators belonging to the Ministry of Environment's strategy were also embedded in the workplan to ensure reporting on, while highlighting WMRA's contribution to the overall sector strategy.
- 3- A presentation in Arabic language was also prepared for WMRA to present the assignment's deliverable to the Minister of Environment based on WMRA's request.
- 4- A presentation was developed on the whole assignment's approach and output.
- 5- A final report on the assignment's approach and outcome was prepared and submitted.
- 6- A table with all selected indicators, their themes and descriptions in Arabic and English was also prepared based on WMRA's request.



Recommendations

The following are the proposed recommendations:

1. In the efforts of supporting WMRA to use KPIs in measuring its operation, an additional presentation was prepared with the assignment's output in Arabic to present it to the Minister of Environment to approve the indicators selected and start working on measuring them and allocating the required resources. It is recommended to present the indicators to the Minister of Environment for approval to commence working on measuring them, collecting data, and allocating the required resources to accelerate the transition into a more circular economy. Once approved by the Minister, it is recommended that WMRA operationalizes the indicators as a follow-up step based on available data from the Ministry of Environment's database, by identifying missing targets, baselines, the data collection methodology and responsible(s).
2. As some of the indicators will also be collected by the Ministry of Environment, it is recommended to coordinate the data collection process and/or reporting to ensure efficiency. Resources should be mobilized to avoid any duplication in efforts.
3. WMRA should update its workplans at least twice a year to ensure monitoring, accountability and learning.
4. A Monitoring Officer should be designated from WMRA's side to oversee and coordinate the data collection and reporting tasks.
5. When monitoring the workplan, it is recommended to report on the progress next to each indicator quarterly for transparency and accountability purposes.
6. A participatory mechanism with the different involved internal and/or external stakeholders should be created to monitor activities of the workplan in a participatory way to identify bottlenecks as early as possible and ensure transparency in reporting.
7. WMRA should hold regular debriefings with the Minister and other leaders, reporting on progress and challenges towards a more circular economy.

I. INTRODUCTION

II. OBJECTIVE



I. Introduction

This activity falls within the context of the UNEP coordinated policy component of the EU-funded SwitchMed II Project in Egypt. Waste management is one of the four sectors that were selected in the Sustainable Consumption and Production National Action Plan in Egypt. This action plan has been developed under SwitchMed in cooperation with the Ministry of Environment, UNEP, and CEDARE. SwitchMed has contributed to highlight the importance of regulations for waste management with the demonstration project “reducing the consumption of single-use plastic bags”. As an outcome and follow-up step, Egypt issued Law No. 202 of 2020 for Integrated Waste Management and its Executive Regulations No. 722 of 2022.

WMRA has identified the need for technical support to develop the following milestones in the law No. 202 and its executive regulations:

- The National Strategy for Integrated Waste Management (Article 5).
- Key performance indicators (KPIs) for monitoring, follow-up, and evaluation of waste management activities (Article 7).
- Consolidated lists of hazardous materials and waste.
- Guidelines for the collection, transportation, storage, treatment, and final safe disposal of all types of hazardous waste (industrial – petroleum, etc.).
- Guidelines for the Handling of Hazardous Materials from Transport and Storage (Article 47).
- Reviewing guidelines for receiving, treating, and disposing of non-hazardous waste (Article 25).

II. Objective

The aim of this activity is to assist the Egyptian Waste Management Regulatory Authority in fulfilling its function according to the Integrated Waste Management Law by developing key performance indicators that can help in monitoring and managing the waste management activities in Egypt, assisting in the transition towards a more circular economy.

The KPIs will serve accountability, transparency, results-based management and most importantly learning purposes.

This should be achieved through holding up to two in-depth consultation sessions with WMRA. The activity's objective was overachieved through different deliverables shared with the WMRA team. This report describes the output of the whole activity since its start in June 2023 up until September 2023.

III. METHODOLOGY



This activity used different data collection tools to achieve its objective.

First, **desk research** was conducted to understand the status quo of activities and existing legislations governing WMRA's work. This was followed by a review of the developed strategy in 2017, executive regulations, former presentations, developed indicators by and for the Ministry of Environment, in addition to WMRA's current workplan.

Second, **four consultation workshops and meetings** were conducted to collect data and produce the main deliverable, namely the proposed indicators, while classifying them per workplan's component.

A- First Consultation Session

A virtual consultation session was held with representatives from WMRA on the 12th of June 2023 ([refer to Annex 2](#)). The main aim of the first consultation session was as follows:

- To narrow down the scope of the assignment and agree on priority questions by WMRA.
- To present previous efforts in developing indicators by WMRA in the last five years.
- To assign a focal point from WMRA's side for this assignment.
- To agree on next steps and actions to be taken.

Two types of objectives of WMRA's work were presented during this meeting, namely internal and external objectives. **Four internal strategic goals** at the level of internal operations and the resources that enable the agency to work effectively were presented and discussed in detail, as well as six external objectives. **The external objectives**, on the other hand, emanate from the strategic objectives of the waste sector as a whole. They seek to achieve the vision of the agency, while achieving the needs of stakeholders in the sector. The objectives of the corresponding indicators, WMRA's projects and milestones were compiled and summarized in different excel sheets and presented to the participants ([refer to WMRA's Updated Workplan in Annex 2](#)).



The meeting achieved its objective by presenting and discussing WMRA 2017-2030 strategy's strengths, namely:

- Adoption of a sustainable and integrated approach.
- Based on WMRA's 20 tasks identified in the decree governing WMRA's tasks and main mandate.
- Validity till 2030.
- Strategy development based on consultative & validation processes with external and internal stakeholders.
- Based on Egypt's 2030 Strategy and Targets.
- Updated and validated document in 2018/2019 by WMRA's previous director and current Environment Minister based on WMRA's running projects.
- Based on international standard indicators for the sector.
- Contextualized indicators.
- Identification of baseline, target, data collection method, etc.
- Identification of activities and milestones.

Participants briefly discussed the status of achievement and agreed that the presented strategy should be reviewed thoroughly, updated, while also incorporating WMRA's current work and projects to help in the reporting process. All participants agreed to invest resources (time, dedicated persons, etc.) in the process to come up with an updated document.

Meeting's Agreements

- 1- Assigning a focal point from WMRA for this assignment.
- 2- Developing KPIs for WMRA's current workplan in a participatory way during the following month (July 2023).
- 3- Sharing developed KPIs and current workplan for the whole sector.

B- Meeting/Call

A virtual meeting was held with representatives from WMRA on the 27th of June 2023. The main aim of the meeting was as follows:

- WMRA presents its expectations from the second consultation workshop.
- WMRA presents available documents (previously developed KPIs for the sector, current workplan, executive regulations and law, etc.) that form the basis for the following workshop.

The meeting achieved its objective by agreeing on expectations of the following physical workshop in July 2023.

C- Second Consultation Session

A physical consultation session was organized by CEDARE on the 26th of June 2023 ([refer to Annex 2](#)). The main aim of the second consultation session was as follows:

- Discuss WMRA's workplan and future role.
- Discuss criteria for selecting indicators.
- Develop indicators for WMRA's workplan.
- Agree on next steps.



The consultation session used different teaching aids and tools (presentation, board activities, group work, etc.) to achieve its objectives. The session adopted an interactive and participatory approach where participants shared their input to design the indicators.

To understand the objective and context of the planned consultation session, CEDARE team started the workshop by providing a brief overview of the history of SwitchMed I and II, the key achievements and challenges. This context was important to understand the role of this assignment in the project.

Second, an introduction about the following topics was given to facilitate group work and have a common understanding:

- Criteria for selecting KPIs.
- Types of indicators.
- International Standard Indicators and component of a robust Solid Waste Management System based on "Waste Aware Benchmark Indicators for Integrated Sustainable Waste Management in the Cities", published by Leed University in 2014.

Third, the strengths and weaknesses of the current workplan submitted by WMRA were presented as the basis for the discussion. The workplan has five main components to achieve WMRA's mandate. The first two components focus on WMRA's internal reform process as "planning and coordinating agency" to comply with its operations with the new Solid Waste Management Regulations, making sure that other implementing partners comply too. The three remaining components focus on WMRA's role as "regulatory and monitoring agency" for the whole integrated Solid Waste Management System in Egypt.

Fourth, KPIs were proposed for each component, thoroughly discussed and amended in group work.



The workshop achieved its objective by designing KPIs for WMRA's current workplan based on current regulations and laws governing its mandate.

Meeting's Output:

- 1- The main output of this workshop is developing 25 KPIs for the five strategic components of WMRA's current workplan ([refer to WMRA's Updated Workplan in Annex 2](#)). Indicators have been categorized and assigned to each component based on discussions and agreements. Indicators belonging to the Ministry of Environment's strategy were also embedded in the workplan to ensure reporting on, while highlighting WMRA's contribution to the overall sector strategy. It was also agreed that the timeframe of the updated workplan would be from 2023 to 2026.
- 2- A short presentation was prepared in Arabic language for WMRA to present the assignment's deliverable to the Minister.
- 3- Finally, a presentation was developed on the whole assignment approach and output.

D- Final Virtual Meeting

A final virtual meeting was held with representatives from WMRA on the 21st of September 2023 ([refer to Annex 2](#)). The main aim of the last meeting was as follows:

- To present the assignment's deliverables and receive WMRA's final feedback and approval.
- To agree on and approve the Minister's presentation content.
- To agree on next steps and actions to be taken and report distribution plans.

The meeting achieved its objective by presenting, discussing, and validating all deliverables and agreeing on next steps.



IV. PROPOSED KPI's

WMRA's current workplan has the following five main components/objectives. 25 indicators were developed in a participatory approach with WMRA's staff to measure the different planned activities and outputs in the next two years ([refer to Table 6 for a full list of indicators per component in Arabic and English](#)).

1. Strategic Planning for the Integrated Solid Waste Management System

Under this component, WMRA is ensuring the existence of proactive policies, an adequate and unified national framework for Solid Waste Management (SWM) and alignment on national, municipal, and local level. It is striving to unify all strategies and implementation of action plans regarding managing the different types of waste (hazardous, non-hazardous, agricultural), while aligning them to the strategies at governorate and municipal level, to ensure efficiency and effectiveness of the process. Three indicators were developed to measure the activities under this component, as presented in Table 1 below.

Component 1	Indicator	Indicator's Theme	Indicator's Description	Operationalization
Strategic planning for the integrated management system	1. An updated national SWM Strategy	Sound institutions, proactive policies, adequacy, and unification of national framework for SWM, legislations and laws, alignment on national, municipal and local level	1-Existence of a comprehensive long-term strategy that is based on national law or laws, regulations to address solid waste management requirements, highlighting the role of all players in the sector	Baseline=0, Target=1
	2. Number of the governorates' workplans aligned with the national plan/ strategy		2-Alignment of the implementation plans to the national plan and strategy on different levels (municipal, local, etc.) to ensure coherence of activities and increase in implementation rate. The higher the number, the better showing alignment and coherence.	Baseline=0, Target Data to be identified by WMRA
	3. Number of governorates that have a municipal waste management plan		3-Design of municipal waste plans in each governorate according and in line with national strategy to ensure better and efficient coverage. The higher the number, the better showing efficiency and effectiveness of the SWM service.	Baseline=0, Target Data to be identified by WMRA

Table 1: Component 1

2. Institutional Organization of the Waste Management Regulatory Authority

Under this component, WMRA is planning to study the current administrative structure and resources to optimize them in light of its new role. It is planning to mobilize its resources to perform its functions in an efficient and effective way. The job description cards for each function will be revised and updated with the main aim of unifying responsibilities and communicating the new tasks. Human resources will be additionally provided and trained, especially the IT department. Processes will be revisited and optimized. New electronic payment methods will be investigated and applied. Finally, the new proposed organizational and institutional setting will be presented for final approval. As having a solid institutional structure is key for the whole sector, 10 indicators were proposed in Table 2.

Component 2	Indicator	Indicator's Theme	Indicator's Description	Operationalization
Institutional organization of the Waste Management Regulatory Authority	4. Issuing a unified waste legislation	Sound local institutions, organizational structure coherence, institutional capacity, assessment of the organizational strength and	Existence of a comprehensive national law or laws, regulations to address solid waste management requirements. The existence of a unified law is a prerequisite for service efficiency and avoiding duplication in role.	Baseline=0, Target=1
	5. Approving the organizational and institutional structure of the Authority	capacity of the department(s) responsible for solid waste management	The degree to which all solid waste management responsibilities are concentrated into a single organization or department that can be held accountable for performance, or if multiple organizations, the presence of a significant concentration of responsibilities in one named agency. The current organizational structure will be revised, and the new structure will be presented for approval. Resource mobilization is a prerequisite for a running SWM system.	Baseline=0, Target=1

Component 2	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	6. Percentage of departments' commitment to the workplans		Development of yearly workplans for each department and high commitment to the planned activities' implementation. The higher the rate, the better ensuring commitment and alignment, avoiding duplication in work.	Baseline=0, Target will be defined by WMRA
	7. Number of functions that have detailed job descriptions after modifying the institutional structure		In the framework of assessing current capacities, functions will be listed, and new clear job description cards will be developed and communicated. Clear roles and functions are prerequisites for effective service delivery.	Baseline and Target will be defined by WMRA
	8. Increase in the number of the Authority's branches in the governorates		Increases in the number of branches to ensure high institutional capacities for SWM in marginalized areas. Increase in numbers ensures inclusiveness and reach out to more remote areas.	Baseline and Target will be defined by WMRA
	9. Percentage of the executive workplans adopted by the Authority departments		WMRA's departments should ensure follow-up on the implementation of the executive plans which are aligned to national strategy to ensure reaching out the national strategy's targets on time. The higher the number, the higher the likelihood of implementing the national strategy on time.	Baseline and Target will be defined by WMRA

Component 2	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	10. The number of governorates with approved organizational structures for the waste management units/dept., out of the total number of governorates		An assessment of the organizational strength and capacity of the department(s) responsible for solid waste management on governorates level and establishing new departments -if needed- based on the approved organizational structure by the Egyptian Central Agency for Organization and Administration (CAOA) as stipulated in the new SWM law number 202. The higher the number, the more likely that remote areas will be covered ensuring decentralization of activities' implementation.	Baseline and Target will be defined by WMRA

Table 2: Component 2

3. Development of Integrated Waste Management Mechanisms

The focus here is on **provider inclusivity**. The main output of different activities under this component is to **have a unified database with updated information** on the informal sector working in the SWM sector, while encouraging them to register and establish legalized companies. Activities under this component encourage the informal sector to join the formal sector, establish companies and register to increase their participation under the supervision of WMRA to better regulate the sector. Protocols between different public agencies need to be finalized to ensure collaboration on different levels. Unified and transparent monitoring criteria will be developed for contracting private companies. Three indicators were developed.

Component 3	Indicator	Indicator's Theme	Indicator's Description	Operationalization
Development of integrated waste management mechanisms	11. Establishing a national information/ database system	Focus on provider inclusivity	Existence of management information system (MIS) in place. Establishment of a unified database that includes updated data on public and private providers and can be used by different authorities engaged in SWM. Error, duplications of work, misleading information will be avoided if data is unified among the different cooperation partners on the different levels.	Baseline=0, Target=1
	12. Number of established/ licensed companies from the informal sector		Increase in the number of newly established companies that used to work informally, in having a license to work under WMRA in SWM. The more companies are registered, the more the informal sector will be controlled and monitored, resulting in a lower percentage of informal activities in the economy.	Baseline and Target will be defined by WMRA
	13. Number of companies that received incentives		Promotion of informal companies working illegally in SWM to register themselves by providing them with a number of incentives to encourage them to join the formal sector. The higher the number of activities receiving promotional packages, the higher the likelihood to register as an official company and engage more in formal rather than informal activities with WMRA.	Baseline and Target will be defined by WMRA

Component 3	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	14. Number of contracts concluded with the newly licensed companies to perform integrated waste management services		Promotion of concluding official contracts with newly established and licensed companies that used to work informally in SWM. The higher the number of contracts, the higher the chance to ensure provider inclusivity and increase service quality.	Baseline and Target will be defined by WMRA

Table 3: Component 3

4. Follow-up on the Implementation of the Management Plans

Activities under components four and five are greatly interrelated. Here WMRA is exercising its role as monitoring and regulatory body and developing monitoring tools to have controlled treatment of disposal. Activities under component four promote recycling, eradication of informal dumps and establishing waste to energy plants. Waste should be handled completely by the waste management and recycling system (waste should not be lost through illegal burning, burying, or dumping in unofficial areas).

Component 4	Indicator	Indicator's Theme	Indicator's Description	Operationalization
Follow up on the implementation of the management plans	15. An approved reporting system for the executive authorities to be submitted to WMRA on a regular basis	3 Rs, Resource Value – 3Rs – reduce, reuse, recycle, WMRA practicing its regulatory and monitoring role based on agreed upon mechanisms and processes, increase in service quality, appropriate service implementation, management and supervision in place.	To ensure follow-up accountability and transparency, executive authorities are obliged to offer a good service quality and report on a regular and continuous basis to WMRA using agreed upon monitoring tools. Without tools and transparent processes in place, WMRA will not be able to monitor sectors' activities. Tools need to be communicated with all partners, in addition to information on reporting cycle.	Baseline and Target will be defined by WMRA

Component 4	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	16. Identification/ Design and usage of monitoring and evaluation tools		Existence of management information system. Regularly measured, collected and monitored data needs to be ensured. WMRA will develop and use monitoring and follow-up tools to ensure better supervision and service quality. Without tools and transparent processes in place, WMRA will not be able to monitor sectors' activities.	Baseline and Target will be defined by WMRA
	17. Activation ratio of waste-to-energy plants within the total plan		It measures the efficiency and utilization of waste-to-energy facilities in a given area or plan. Waste-to-energy plants are designed to convert waste materials, such as municipal solid waste or biomass, into usable energy through various processes like incineration or anaerobic digestion. The activation ratio is calculated by dividing the number of waste-to-energy plants that are operational or actively converting waste into energy by the total number of planned waste-to-energy plants within a specific plan or region. This ratio provides insights into the extent to which waste management strategies are being implemented and the progress made in transitioning waste into a valuable energy resource.	Baseline and Target will be defined by WMRA

Component 4	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	18. Quantity of refuse-derived fuel (RDF)		<p>It refers to the measurement of the amount of RDF produced or consumed within a given period of time. RDF is considered an alternative fuel source that can be used in place of traditional fossil fuels, such as coal or oil, in various industrial processes. The quantity of RDF produced or consumed is an important waste indicator as it provides insights into the efficiency of waste management practices and the utilization of waste as a resource.</p>	Baseline and Target will be defined by WMRA
	19. Percentage of waste disposed of in a safe way (sanitary burial)		<p>This indicator refers to the proportion of waste that is properly and safely disposed of through burial in a sanitary landfill or burial site. The percentage of waste disposed of in a safe way in a sanitary burial is calculated by dividing the amount of waste properly buried in sanitary landfills by the total amount of waste generated within a given period of time. This indicator provides insights into the efficiency and effectiveness of waste management systems in ensuring safe disposal practices.</p>	Baseline and Target will be defined by WMRA

Component 4	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	20. Efficiency rate of municipal waste collection		<p>The indicator is also related to "effectiveness of street cleaning" in a city or country. Higher resource efficiency means using fewer resources to achieve the same output or effect. A combination of operational efficiency indicators can be used here to measure the efficiency rate namely the deadhead rate, waste collected per distance unit, stopping time rate, and costs, efficiency and effectiveness of waste transport.</p>	Baseline and Target will be defined by WMRA
	21. Number of household cooker units that have been established		<p>It is used to monitor the progress and effectiveness of initiatives related to household cooking solutions, particularly in the context of sustainable development.</p> <p>These units can be powered by different energy sources, including electricity, gas, biomass, or a combination of these.</p> <p>The establishment of household cooker units is an important aspect to consider when assessing waste management practices, as it gives insights into the availability and accessibility of clean cooking technologies, which are crucial for improving health outcomes, reducing environmental pollution.</p>	Baseline and Target will be defined by WMRA

Component 4	Indicator	Indicator's Theme	Indicator's Description	Operationalization
	22. Total recycled waste		Percentage of total municipal solid waste generated that is recycled. The indicator of waste reuse and recycling is derived by dividing the quantity of total and specific-category waste reused and recycled by the total quantity of waste and specific-category waste generated and expressing the result as a percentage.	Baseline and Target will be defined by WMRA
	23. Complete elimination of random dumps		The number of incidents where solid waste is disposed of without environmental control. The target of this indicator should be zero.	Baseline needs to be identified. Target value=0

Table 4: Component 4

5. Monitoring the Integrated Waste System (Operation Phase)

The focus here is on collection quality and coverage. Activities under this component aim at increasing the percentage of households in the city/governorate that receive a reliable waste collection service. To achieve this, a monitoring plan should be developed focusing on non-hazardous waste. Follow-up and monitoring, as well as provision of technical advice will be provided to ensure service quality, increase in coverage area, while decreasing pollution level. Collaboration is needed to ensure delivery of services in an acceptable and high-quality standard.

Component 5	Indicator	Indicator's Theme	Indicator's Description	Operationalization
Monitoring the Integrated Waste System (Operation Phase)	24. Percentage of citizen satisfaction with the service level	Waste collection coverage and quality, degree of openness, transparency and accountability of bid processes, higher satisfaction with process and quality	Qualitative indicator to assess the quality of the waste collection/ street cleaning service. Combination of indicators can be used here: quality of waste collection and street cleaning service, percentage of households in the city that receive a reliable waste collection service, increase in waste collection coverage, efficiency and effectiveness of waste transport	Baseline and Target will be defined by WMRA
	25. Percentage of implementation or compliance with the inspection plan		Part of monitoring activities, a comprehensive inspection plan for all governorates will be developed. A higher percentage of compliance indicates commitments to follow-up to ensure higher quality and satisfaction rate.	Baseline and Target will be defined by WMRA

Table 5: Component 5

Objective	Indicator	مؤشر	هدف
Strategic planning for the integrated management system	1. An updated national SWM Strategy	١. تحديث الاستراتيجية الوطنية	التخطيط الاستراتيجي لمنظومة الإدارة المتكاملة
	2. Number of the governorates' workplans aligned with the national plan/strategy	٢. عدد خطط المحافظات المتوافقة مع الخطة/ الاستراتيجية الوطنية	
	3. Number of governorates that have a municipal waste management plan	٣. عدد المحافظات التي لها خطة إدارة مخلفات بلدية	
Institutional organization of the Waste Management Regulatory Authority	4. Issuing a unified waste legislation	٤. اصدار تشريع موحد للمخلفات	التنظيم المؤسسي لجهاز تنظيم إدارة المخلفات

Objective	Indicator	مؤشر	هدف
	5. Approving the organizational and institutional structure of the Authority	٥. اعتماد الهيكل التنظيمي المؤسسي للجهاز	
	6. Percentage of departments' commitment to the workplans	٦. نسبة التزام الإدارات بالخطط	
	7. Number of functions that have detailed job descriptions after modifying the institutional structure	٧. عدد الوظائف التي لديها توصيف وظيفي مفصل بعد تعديل الهيكل	
	8. Increase in the number of the Authority's branches in the governorates	٨. زيادة في عدد فروع الجهاز في المحافظات	
	9. Percentage of the executive workplans adopted by the Authority departments	٩. نسبة الخطط التنفيذية لإدارات الجهاز	
	10. The number of governorates with approved organizational structures for the waste management units/ dept., out of the total number of governorates	١٠. عدد المحافظات ذات هياكل تنظيمية معتمدة لوحدات إدارية للمخلفات من إجمالي عدد المحافظات	
Development of integrated waste management mechanisms	11. Establishing a national information/database system	١١. إنشاء نظام وطني للمعلومات	تطوير آليات الإدارة المتكاملة للمخلفات
	12. Number of established/licensed companies from the informal sector	١٢. عدد الشركات التي تم تأسيسها/ترخيصها من القطاع غير الرسمي	
	13. Number of companies that received incentives	١٣. عدد الشركات التي حصلت على حوافز	
	14. Number of contracts concluded with the newly licensed companies to perform integrated waste management services	١٤. عدد العقود المبرمة لأداء خدمات الإدارة المتكاملة للمخلفات	

Objective	Indicator	مؤشر	هدف
Follow up on the implementation of the management plans	15. An approved reporting system for the executive authorities to be submitted to WMRA on a regular basis	١٥. انشاء نظام للتقارير للجهات التنفيذية يقدم للجهاز بصفة دورية واعتماده	متابعة تنفيذ خطط إدارة المنظومة
	16. Identification/ Design and usage of monitoring and evaluation tools	١٦. تحديد واعتماد أدوات الرصد والتقييم	
	17. Activation ratio of waste-to-energy plants within the total plan	١٧. نسبة التفعيل لمحطات تحويل المخلفات إلى طاقة من إجمالي المخطط له	
	18. Quantity of refuse-derived fuel (RDF)	١٨. كمية الوقود المشتق من المرفوضات	
	19. Percentage of waste disposed of in a safe way (sanitary burial)	١٩. نسبة المخلفات التي يتم التخلص منها بطريقة آمنة (دفن صحي)	
	20. Efficiency rate of municipal waste collection	٢٠. نسبة كفاءة جمع مخلفات البلدية	
	21. Number of household cooker units that have been established	٢١. عدد وحدات البوتاجاز المنزلي التي تم إنشاؤها	
	22. Total recycled waste	٢٢. اجمالي المخلفات التي تم تدويرها	
	23. Complete elimination of random dumps	٢٣. القضاء نهائياً على المقالب العشوائية	
Monitoring the Integrated Waste System (Operation Phase)	24. Percentage of citizen satisfaction with the service level	٢٤. نسبة رضا المواطنين على مستوى الخدمة	مراقبة المنظومة المتكاملة للمخلفات (مرحلة تشغيل المنظومة)
	25. Percentage of implementation or compliance with the inspection plan	٢٥. نسبة تنفيذ أو الالتزام بخطة التفتيش	

Table 6: Proposed Indicators in Arabic and English

V. RECOMMENDATIONS



V. Recommendations

The following are the proposed recommendations:

1. In the efforts of supporting WMRA to use KPIs in measuring its operation, an additional presentation was prepared with the assignment's output in Arabic to present it to the Minister of Environment to approve the indicators selected and start working on measuring them and allocating the required resources. It is recommended to present the indicators to the Minister of Environment for approval to commence working on measuring them, collecting data, and allocating the required resources to accelerate the transition into a more circular economy. Once approved by the Minister, it is recommended that WMRA operationalizes the indicators as a follow-up step based on available data from the Ministry of Environment's database, by identifying missing targets, baselines, the data collection methodology and responsible(s).
2. As some of the indicators will also be collected by the Ministry of Environment, it is recommended to coordinate the data collection process and/or reporting to ensure efficiency. Resources should be mobilized to avoid any duplication in efforts.
3. WMRA should update its workplans at least twice a year to ensure monitoring, accountability and learning.
4. A Monitoring Officer should be designated from WMRA's side to oversee and coordinate the data collection and reporting tasks.
5. When monitoring the workplan, it is recommended to report on the progress next to each indicator quarterly for transparency and accountability purposes.
6. A participatory mechanism with the different involved internal and/or external stakeholders should be created to monitor activities of the workplan in a participatory way to identify bottlenecks as early as possible in the transition towards a more circular economy and ensure transparency in reporting.
7. WMRA should hold regular debriefings with the Minister and other leaders, reporting on progress and challenges towards a more circular economy.

VI. ANNEXES

Annex 1: Final Indicators, Descriptions and Themes in English and Arabic

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
1. An updated national SWM Strategy	Sound institutions, proactive policies, adequacy, and unification of national framework for SWM, legislations and laws, alignment on national, municipal and local level	Existence of a comprehensive long-term strategy that is based on national law or laws, regulations to address solid waste management requirements, highlighting the role of all players in the sector	وجود استراتيجية شاملة طويلة الأجل تستند إلى قوانين، أو قوانين وطنية، واللوائح لمعالجة متطلبات إدارة المخلفات الصلبة، وتسليط الضوء على دور جميع الفاعلين في القطاع.	المؤسسات الرشيدة والسياسات الاستباقية، والملاءمة، وتوحيد الإطار الوطني لإدارة المخلفات الصلبة، والتشريعات والقوانين، والمواءمة على المستوى الوطني، والمحلي.	١. تحديث الاستراتيجية الوطنية
2. Number of the governorates' workplans aligned with the national plan/ strategy		Alignment of the implementation plans to the national plan and strategy on different levels (municipal, local, etc.) to ensure coherence of activities and increase in implementation rate. The higher the number, the better showing alignment and coherence.	مواءمة خطط التنفيذ مع الخطة الوطنية والاستراتيجية الوطنية على مختلف المستويات (البلدية، والمحلية، وغيرها)، وذلك لضمان اتساق الأنشطة، وزيادة معدل التنفيذ. كلما زاد الرقم، كلما كانت المواءمة والتماسك مع الخطط الأخرى أفضل.		٢. عدد خطط المحافظات المتوافقة مع الخطة/ الاستراتيجية الوطنية
3. Number of governorates that have a municipal waste management plan		Design of municipal waste plans in each governorate according and in line with national strategy to ensure better and efficient coverage. The higher the number, the better showing efficiency and effectiveness of the SWM service.	تصميم خطط مخلفات البلدية في كل محافظة، بما يتماشى مع الاستراتيجية الوطنية لضمان تغطية أفضل وأكثر فعالية. كلما زاد الرقم، كلما ظهرت كفاءة وفعالية خدمة إدارة المخلفات الصلبة أفضل.		٣. المحافظات التي لها خطة إدارة مخلفات على مستوى البلدية

Table 1: Component 1

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
4. Issuing a unified waste legislation	Sound local institutions, organizational structure coherence, institutional capacity, assessment of the organizational strength and capacity of the department(s) responsible for solid waste management	Existence of a comprehensive national law or laws, and regulations to address solid waste management requirements. The existence of a unified law is a prerequisite for service efficiency and avoiding duplication in role.	وجود قانون أو قوانين وطنية شاملة، ولوائح لمعالجة متطلبات إدارة المخلفات الصلبة. يعد وجود قانون موحد شرطاً أساسياً لكفاءة الخدمة، وتجنب الازدواجية في الدور.	المؤسسات المحلية الرشيدة، واتساق الهيكل التنظيمي، والقدرة المؤسسية، وتقييم القوة التنظيمية، وقدرة الإدارة (الإدارات) المسؤولة عن إدارة المخلفات الصلبة	٤. اصدار تشريع موحد للمخلفات
5. Approving the organizational and institutional structure of the Authority		The degree to which all solid waste management responsibilities are concentrated into a single organization or department that can be held accountable for performance, or in case of multiple organizations, the presence of a significant concentration of responsibilities in one named agency. The current organizational structure will be revised, and the new structure will be presented for approval. Resource mobilization is a prerequisite for a running SWM system.	درجة تركيز جميع مسؤوليات إدارة المخلفات الصلبة في منظمة أو إدارة واحدة يمكن مساءلتها عن الأداء؛ أو إذا كانت هناك منظمات متعددة، يفضل تركيز المسؤوليات تحت هيئة واحدة محددة. وسيراجع الهيكل التنظيمي الحالي، وسيقدم الهيكل الجديد للاعتماد. تعتبر تعبئة الموارد شرط مسبق لتشغيل نظام إدارة المخلفات الصلبة.		٥. اعتماد الهيكل التنظيمي المؤسسي للجهاز

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
6. Percentage of departments' commitment to the workplans		Development of yearly workplans for each department and high commitment to the planned activities' implementation. The higher the rate, the better ensuring commitment and alignment, avoiding duplication in work.	وضع خطط عمل سنوية لكل قسم، والالتزام العالي بتنفيذ الأنشطة المخطط لها. كلما ارتفع المعدل، كلما كان ضمان الالتزام والمواءمة أفضل، مع تجنب الازدواجية في العمل.		٦. نسبة التزام الإدارات بالخطط
7. Number of functions that have detailed job descriptions after modifying the institutional structure		In the framework of assessing current capacities, functions will be listed, and new clear job description cards will be developed and communicated. Clear roles and functions are prerequisites for effective service delivery.	وفي إطار تقييم القدرات الحالية، ستدرج الوظائف، وستوضع بطاقات جديدة واضحة لتوصيف الوظائف، وسيتم التبليغ بها، وتطويرها؛ يعتبر توضيح الأدوار والوظائف شرط أساسي لتقديم الخدمات بفعالية.		٧. عدد الوظائف التي لديها توصيف وظيفي مفصل بعد تعديل الهيكل
8. Increase in the number of the Authority's branches in the governorates		Increases in the number of branches to ensure high institutional capacities for SWM in marginalized areas. Increase in numbers ensures inclusiveness and reach out to more remote areas.	زيادة عدد الفروع لضمان توفير قدرات مؤسسية عالية لإدارة المخلفات الصلبة في المناطق المهمشة. تضمن الزيادة في الأعداد مبدأ الشمولية، مع إمكانية الوصول إلى المناطق النائية.		٨. زيادة في عدد فروع الجهاز في المحافظات

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
9. Percentage of the executive workplans adopted by the Authority departments		WMRA's departments should ensure follow-up on the implementation of the executive plans which are aligned to national strategy to ensure reaching out the national strategy's targets on time. The higher the number, the higher the likelihood of implementing the national strategy on time.	يجب على إدارات جهاز تنظيم إدارة المخلفات ضمان متابعة تنفيذ الخطط التنفيذية التي تتماشى مع الاستراتيجية الوطنية، وذلك لضمان الوصول إلى الأهداف الاستراتيجية الوطنية في الوقت المحدد له. وكلما زاد عدد الإدارات التي تلتزم، كلما زادت احتمالية تنفيذ الاستراتيجية الوطنية في الوقت المحدد.		٩. نسبة الخطط التنفيذية لإدارات الجهاز
10. The number of governorates with approved organizational structures for the waste management units/dept., out of the total number of governorates		An assessment of the organizational strength and capacity of the department(s) responsible for solid waste management on governorates level and establishing new departments -if needed- based on the approved organizational structure by the Egyptian Central Agency for Organization and Administration (CAOA) as stipulated in the new SWM law number 202. The higher the number, the more likely that remote areas will be covered ensuring decentralization of activities' implementation.	تقييم القوة والقدرة التنظيمية للإدارة (الإدارات) المسؤولة عن إدارة المخلفات الصلبة على مستوى المحافظات، وإنشاء إدارات جديدة - إذا لزم الأمر - بناء على الهيكل التنظيمي المعتمد من قبل الجهاز المركزي للتنظيم والإدارة (CAOA)، وذلك على النحو المنصوص عليه في قانون إدارة المخلفات الصلبة الجديد رقم ٢٠٢. وكلما زاد عدد الهياكل المعتمدة، كلما زادت احتمالية تغطية المناطق النائية بما يكفل تحقيق اللامركزية في تنفيذ الأنشطة بشكل أفضل.		١٠. عدد المحافظات ذات هياكل تنظيمية معتمدة للوحدات أو الأجهزة الإدارية المسؤولة عن إدارة المخلفات من إجمالي عدد المحافظات

Table 2: Component 2

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
11. Establishing a national information/database system	Focus on provider inclusivity	Existence of management information system (MIS) in place. Establishment of a unified database that includes updated data on public and private providers and can be used by different authorities engaged in SWM. Error, duplication of work, misleading information will be avoided if data is unified among the different cooperation partners on the different levels.	وجود نظام معلومات إداري (MIS). إنشاء قاعدة بيانات موحدة تتضمن بيانات محدثة عن مقدمي الخدمات من القطاعين العام والخاص؛ ويمكن استخدامها من قبل مختلف السلطات العاملة في إدارة المخلفات الصلبة. إذا تم توحيد البيانات بين مختلف شركاء التعاون على مختلف المستويات، سيتم تجنب الأخطاء، وازدواجية العمل والمعلومات المضللة.	التركيز على شمولية مقدمي الخدمة	١١. إنشاء نظام وطني للمعلومات
12. Number of established/licensed companies from the informal sector		Increase in the number of newly established companies that used to work informally, in having a license to work under WMRA in SWM. The more companies are registered, the more the informal sector will be controlled and monitored, resulting in a lower percentage of informal activities in the economy.	زيادة عدد الشركات المنشأة حديثاً - التي اعتادت العمل بشكل غير رسمي - في الحصول على ترخيص للعمل، بموجب اللوائح المتبعة في جهاز تنظيم إدارة المخلفات وذلك فيما يتعلق بإدارة المخلفات الصلبة. وكلما زاد عدد الشركات المسجلة، كلما زادت إمكانية مراقبة القطاع غير الرسمي ورصده، مما يؤدي إلى انخفاض نسبة الأنشطة غير الرسمية في الاقتصاد.		١٢. عدد الشركات التي تم تأسيسها/ترخيصها من القطاع غير الرسمي

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
13. Number of companies that received incentives		Promotion of informal companies working illegally in SWM to register themselves by providing them with a number of incentives to encourage them to join the formal sector. The higher the number of activities receiving promotional packages, the higher the likelihood to register as an official company and engage more in formal rather than informal activities with WMRA.	تشجيع الشركات غير الرسمية العاملة بشكل غير قانوني في إدارة المخلفات الصلبة على تسجيل نفسها، وذلك من خلال تزويدها بعدد من الحوافز، لتشجيعها على الانضمام إلى القطاع الرسمي. كلما زاد عدد الأنشطة التي تتلقى حزمًا ترويجية، كلما زادت احتمالية التسجيل كشركة رسمية، والمشاركة بشكل أكبر في الأنشطة الرسمية، بدلا من الأنشطة غير الرسمية مع جهاز تنظيم إدارة المخلفات.	التركيز على شمولية مقدمي الخدمة	١٣. عدد الشركات التي حصلت على حوافز
14. Number of contracts concluded with the newly licensed companies to perform integrated waste management services		Promotion of concluding official contracts with newly established and licensed companies that used to work informally in SWM. The higher the number of contracts, the higher the chance to ensure provider inclusivity and increase service quality.	الترويج لإبرام عقود رسمية مع الشركات المنشأة حديثًا والمرخصة التي كانت تعمل بشكل غير رسمي في إدارة المخلفات الصلبة. كلما زاد عدد العقود، كلما زادت فرصة ضمان شمولية مقدمي الخدمة وزيادة جودتها.		١٤. عدد العقود المبرمة لأداء خدمات الإدارة المتكاملة للمخلفات

Table 3: Component 3

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
15. An approved reporting system for the executive authorities to be submitted to WMRA on a regular basis	Resource Value – 3Rs – reduce, reuse, recycle, WMRA practicing its regulatory and monitoring role based on agreed upon mechanisms and processes, increase in service quality, appropriate service implementation, management and supervision in place.	To ensure follow-up on accountability and transparency, executive authorities are obliged to offer a good service quality and report on a regular and continuous basis to WMRA using agreed upon monitoring tools. Without tools and transparent processes in place, WMRA will not be able to monitor sectors' activities. Tools need to be communicated with all partners, in addition to information on the reporting cycle.	لضمان متابعة المساءلة والشفافية، تلتزم السلطات التنفيذية بتقديم خدمة تتسم بالجودة، مع تقديم تقارير منتظمة ومستمرة إلى جهاز تنظيم إدارة المخلفات، باستخدام أدوات المتابعة المتفق عليها. بدون الأدوات المناسبة والعمليات التي تتسم بالشفافية، لن يتمكن جهاز تنظيم إدارة المخلفات من متابعة أنشطة القطاعات. ويلزم إبلاغ جميع الشركاء بالأدوات المناسبة، بالإضافة إلى أدوارهم.	تتمثل قيمة الموارد في التركيز على الحد من المخلفات، وإعادة الاستخدام، وإعادة التدوير؛ مع ممارسة جهاز تنظيم إدارة المخلفات لدوره التنظيمي والرقابي، بناء على الآليات والعمليات المتفق عليها؛ وزيادة جودة الخدمة، وتنفيذ الخدمة المناسبة، مع وجود إدارة متميزة وإشراف جيد.	١٥. إنشاء نظام للتقارير للجهات التنفيذية يقدم للجهاز بصفة دورية واعتماده
16. Identification/ Design and usage of monitoring and evaluation tools		Existence of management information system. Regularly measured, collected and monitored data needs to be ensured. WMRA will develop and use monitoring and follow-up tools to ensure better supervision and service quality. Without tools and transparent processes in place, WMRA will not be able to monitor sectors' activities.	وجود نظام للمعلومات الإداري. ويلزم ضمان قياس البيانات، وجمعها، ورصدها بانتظام. سيقوم جهاز تنظيم إدارة المخلفات بتطوير واستخدام أدوات المراقبة والمتابعة لضمان إشراف أفضل على أداء الخدمة وجودتها. بدون توافر الأدوات المناسبة والعمليات التي تتسم بالشفافية، لن يتمكن جهاز تنظيم إدارة المخلفات من مراقبة أنشطة القطاعات.		١٦. تحديد واعتماد أدوات المتابعة والتقييم

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
17. Activation ratio of waste-to-energy plants within the total plan		<p>It measures the efficiency and utilization of waste-to-energy facilities in a given area or plan. Waste-to-energy plants are designed to convert waste materials, such as municipal solid waste or biomass, into usable energy through various processes like incineration or anaerobic digestion.</p> <p>The activation ratio is calculated by dividing the number of waste-to-energy plants that are operational or actively converting waste into energy by the total number of planned waste-to-energy plants within a specific plan or region. This ratio provides insights into the extent to which waste management strategies are being implemented and the progress made in transitioning waste into a valuable energy resource.</p>	<p>قياس كفاءة واستخدام مرافق تحويل المخلفات إلى طاقة في منطقة أو خطة معينة. تم تصميم محطات تحويل المخلفات إلى طاقة لتحويل المخلفات - مثل مخلفات البلدية الصلبة أو الكتلة الحيوية - إلى طاقة قابلة للاستخدام من خلال عمليات مختلفة، مثل الحرق أو الهضم اللاهوائي.</p> <p>يتم حساب نسبة التنشيط بقسمة عدد محطات تحويل المخلفات إلى طاقة (التي تعمل أو تحول المخلفات إلى طاقة) على إجمالي عدد محطات تحويل المخلفات إلى الطاقة المخطط لها ضمن خطة أو منطقة معينة. توفر هذه النسبة نظرة حول مدى تنفيذ استراتيجيات إدارة المخلفات والتقدم المحرز في تحويل المخلفات إلى مورد طاقة قيم.</p>		<p>١٧. نسبة التفعيل لمحطات تحويل المخلفات إلى طاقة من إجمالي المخطط له</p>

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
18. Quantity of refuse-derived fuel (RDF)		<p>It refers to the measurement of the amount of RDF produced or consumed within a given period of time.</p> <p>RDF is considered an alternative fuel source that can be used in place of traditional fossil fuels, such as coal or oil, in various industrial processes. The quantity of RDF produced or consumed is an important waste indicator as it provides insights into the efficiency of waste management practices and the utilization of waste as a resource.</p>	<p>تشير إلى قياس كمية الوقود المشتق من المخلفات RDF المنتجة أو المستهلكة خلال فترة زمنية معينة.</p> <p>تعتبر كمية الوقود المشتق من المخلفات RDF مصدرا بديلا للوقود، يمكن استخدامه بدلا من الوقود الأحفوري التقليدي - مثل الفحم أو النفط - في العمليات الصناعية المختلفة. تعد كمية الوقود المشتق من المخلفات RDF - المنتجة أو المستهلكة - بمثابة مؤشر هام للمخلفات، لأنها توفر نظرة ثاقبة لكفاءة ممارسات إدارة المخلفات واستخدام المخلفات كمورد.</p>		١٨. كمية الوقود المشتق من المرفوضات
19. Percentage of waste disposed of in a safe way (sanitary burial)		<p>This indicator refers to the proportion of waste that is properly and safely disposed of through burial in a sanitary landfill or burial site.</p> <p>The percentage of waste disposed of in a safe way in a sanitary burial is calculated by dividing the amount of waste properly</p>	<p>يشير هذا المؤشر إلى نسبة المخلفات التي يتم التخلص منها بشكل صحيح وآمن، وذلك من خلال الدفن في مكب نفايات صحي أو موقع دفن.</p> <p>يتم حساب النسبة المئوية للمخلفات التي يتم التخلص منها بطريقة آمنة في الدفن الصحي بقسمة كمية المخلفات المدفونة بشكل</p>		١٩. نسبة المخلفات التي يتم التخلص منها بطريقة آمنة (دفن صحي)

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
		buried in sanitary landfills by the total amount of waste generated within a given period of time. This indicator provides insights into the efficiency and effectiveness of waste management systems in ensuring safe disposal practices.	صحيح في مدافن المخلفات الصحية على إجمالي كمية المخلفات المتولدة خلال فترة زمنية معينة. يقدم هذا المؤشر نظرة حول كفاءة وفعالية أنظمة إدارة المخلفات في ضمان ممارسات التخلص الآمن.		
20. Efficiency rate of municipal waste collection		The indicator is also related to "effectiveness of street cleaning" in a city or country. Higher resource efficiency means using fewer resources to achieve the same output or effect. A combination of operational efficiency indicators can be used here to measure the efficiency rate namely the deadhead rate, waste collected per distance unit, stopping time rate, and costs, efficiency and effectiveness of waste transport.	يرتبط المؤشر أيضا بـ "فعالية تنظيف الشوارع" في مدينة أو بلد. تعني كفاءة الموارد الأعلى استخدام موارد أقل لتحقيق نفس الناتج أو التأثير. يمكن استخدام مجموعة من مؤشرات الكفاءة التشغيلية هنا لقياس معدل الكفاءة وهي معدل الأميال/ الشحن الفارغ، والنفايات التي يتم جمعها لكل وحدة مسافة، ومعدل وقت التوقف، وتكاليف، وكفاءة، وفعالية نقل المخلفات.		٢٠. نسبة كفاءة جمع مخلفات البلدية
21. Number of household cooker units that have been established		It is used to monitor the progress and effectiveness of initiatives related to household cooking solutions, particularly in the context of sustainable	يتم استخدامه لرصد التقدم المحرز وفعالية المبادرات المتعلقة بحلول الطهي المنزلية، لا سيما في سياق التنمية المستدامة.		٢١. عدد وحدات البوتاجاز المنزلي التي تم إنشاؤها

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
		development. These units can be powered by different energy sources, including electricity, gas, biomass, or a combination of these. The establishment of household cooker units is an important aspect to consider when assessing waste management practices, as it gives insights into the availability and accessibility of clean cooking technologies, which are crucial for improving health outcomes, reducing environmental pollution.	يمكن تشغيل هذه الوحدات بواسطة مصادر طاقة مختلفة، بما في ذلك الكهرباء، أو الغاز، أو الكتلة الحيوية، أو مزيج من كل منها. يعد إنشاء وحدات الطهي المنزلية بمثابة جانب مهم يجب مراعاته عند تقييم ممارسات إدارة المخلفات، لأنه يعطي نظرة ثاقبة حول توافر تقنيات الطهي النظيف، وإمكانية الوصول إليها، والتي تعتبر ضرورية لتحسين النتائج الصحية، والحد من التلوث البيئي.		
22. Total recycled waste		Percentage of total municipal solid waste generated that is recycled. The indicator of waste reuse and recycling is derived by dividing the quantity of total and specific-category waste reused and recycled by the total quantity of waste and specific-category waste generated and expressing the result as a percentage.	النسبة المئوية لإجمالي المخلفات الصلبة البلدية التي يتم إعادة تدويرها. يتم اشتقاق مؤشر إعادة استخدام المخلفات وإعادة تدويرها بقسمة كمية المخلفات الكلية، والفئة المحددة المعاد استخدامها، وإعادة تدويرها على الكمية الإجمالية للمخلفات، ومخلفات الفئة المحددة المتولدة، مع التعبير عن النتيجة كنسبة مئوية.		٢٢. إجمالي المخلفات التي تم تدويرها
23. Complete elimination of random dumps		The number of incidents where solid waste is disposed of without environmental control. The target of this indicator should be zero.	عدد المرات التي يتم فيها التخلص من المخلفات الصلبة دون رقابة بيئية. يجب أن يكون هدف هذا المؤشر صفرًا.		٢٣. القضاء نهائيًا على المقالب العشوائية

Table 4: Component 4

Indicator	Indicator's Theme	Indicator's Description	وصف المؤشر	موضوع المؤشر	مؤشر
24. Percentage of citizen satisfaction with the service level	Waste collection coverage and quality, degree of openness, transparency and accountability of bid processes, higher satisfaction with process and quality	Qualitative indicator to assess the quality of the waste collection/ street cleaning service. Combination of indicators can be used here: quality of waste collection and street cleaning service, percentage of households in the city that receive a reliable waste collection service, increase in waste collection coverage, efficiency and effectiveness of waste transport.	مؤشر نوعي لتقييم جودة خدمة جمع المخلفات / خدمة تنظيف الشوارع. يمكن استخدام مجموعة من المؤشرات هنا: جودة خدمة جمع المخلفات وتنظيف الشوارع، والنسبة المئوية للأسر المقيمة بالمدينة والتي تتلقى خدمة موثوقة لجمع المخلفات، وزيادة تغطية جمع المخلفات، وكفاءة وفعالية نقل المخلفات.	تغطية جمع المخلفات وجودتها، ودرجة الانفتاح والشفافية والمساءلة في عمليات المناقصات، وزيادة الرضا عن الخدمة والجودة	٢٤. نسبة رضا المواطنين عن مستوى الخدمة
25. Percentage of implementation or compliance with the inspection plan		Part of monitoring activities, a comprehensive inspection plan for all governorates will be developed. A higher percentage of compliance indicates commitments to follow-up to ensure higher quality and satisfaction rate.	وكجزء من أنشطة الرصد، سيتم وضع خطة تفتيش شاملة لجميع المحافظات. تشير نسبة الامتثال الأعلى إلى التزامات المتابعة لضمان جودة أعلى ومعدل رضا أفضل.		٢٥. نسبة تنفيذ أو الالتزام بخطة التفتيش

Table 5: Component 5

Annex 2: Consultation Sessions and Meetings

1. Report of the First Consultation Session on June 12th, 2023

I. Introduction to the Assignment

This assignment falls within the context of the policy component of the SwitchMed Project. Waste management is one of the four sectors that were selected in the SCP National Action Plan in Egypt. This action plan has been developed in cooperation with the Ministry of Environment, UNEP/SwitchMed, and CEDARE, and has been funded by the European Commission. SwitchMed has contributed to highlight the importance of regulations for waste management especially with the demonstration project on reducing the consumption of single-use plastic bags. Egypt issued Law No. 202 of 2020 for Integrated Waste Management and its Executive Regulations No. 722 of 2022.

The Waste Management Regulatory Authority (WMRA) has identified the need for technical support to develop the following milestones in the law and its executive regulations:

- The National Strategy for Integrated Waste Management (Article 5).
- Key performance Indicators (KPIs) for monitoring, follow-up, and evaluation of waste management activities (Article 7).
- Consolidated lists of hazardous materials and waste.
- Guidelines for the collection, transportation, storage, treatment, and final safe disposal of all types of hazardous waste (industrial – petroleum, etc.).
- Guidelines for the Handling of Hazardous Materials from Transport and Storage (Article 47).
- Reviewing guidelines for receiving, treating, and disposing of non-hazardous waste (Article 25).

II. Assignment Objective

The aim of this activity is to assist WMRA in fulfilling its function according to the Integrated Waste Management Law by developing key performance indicators that can help in monitoring and managing the waste management activities in Egypt. The KPIs will serve accountability, transparency, results-based management and most importantly learning purposes.

This should be achieved through holding three in-depth consultation sessions with WMRA and debriefing sessions with CEDARE. This report describes the output of the first consultative meeting held on June 12th, 2023 at 13:00 CET.

III. Meeting's Output

Meeting Date and Time: 12.06.23 from 13:00-14:30 CET

Meeting's Form: virtual meeting

Meeting's Participants: Salma Sabri, Strategic Planning, Evaluation and Learning Consultant.

Tarek el Araby, CEO, WMRA.

Nagwa El-Karawy, Senior Advisor to Minister of Environment, WMRA.

Khaled El Fara, Advisor to WMRA.

Doaa Barbry, Department Head, WMRA.

Hossam Allam, SGP Regional Director, CEDARE.

Ghada Moghny, Senior Programme Coordinator, CEDARE.

Salma Nooh, Junior Programme Coordinator, CEDARE.

The main aim of the first consultation session is as follows:

- To narrow down the scope and agree on priority questions
- To present previous efforts in developing indicators
- To agree on next steps and actions to be taken

The meeting achieved its objective by presenting and discussing the developed WMRA 2017-2030 strategy's strengths, namely [\(refer to Annex I\)](#):

- Adoption of sustainable and integrated approach
- Based on WMRA's 20 tasks identified in the decree
- Validity till 2030
- Strategy development based on consultative & validation process with external and internal stakeholders
- Based on Egypt's 2030 Strategy
- Document updated & validated in 2018/2019 based on WMRA's running projects
- Based on international standard indicators for the sector
- Contextualized indicators
- Identification of baseline, target, data collection method, etc.
- Identification of activities and milestones

Two types of objectives were presented, namely internal and external objectives. Four Internal strategic goals at the level of internal operations and the resources that enable the agency to work effectively were presented and discussed in detail, as well as six external objectives. The external objectives, on the other hand, emanate from the strategic objectives of the waste sector as a whole. They seek to achieve the vision of the agency, while achieving the needs of stakeholders in the sector. The objectives, corresponding indicators, WMRA's projects and milestones were compiled and summarized in different excel sheets and presented to the participants [\(refer to Annex II\)](#). Participants briefly discussed the status of achievement and agreed that the presented strategy has to be reviewed thoroughly, updated, while also incorporating current WMRA's work and projects to help in the reporting process. All participants agreed to invest resources (time, dedicated persons, etc.) in the process to come up with an updated document.

IV. Meeting's Agreements and Next Steps

Agreement/Task	Responsibility	Status
Send latest strategy document and meeting's presentation	Salma Sabri	Done
Send WMRA's current workplan including info on running projects	WMRA	Pending
Appointment of key focal points for WMRA	WMRA	Pending
Agree on a second consultative meeting to update current strategy and agree on indicators	WMRA/CEDARE/Salma Sabri	In progress. Meeting to be held in a neutral place (ex: hotel) by mid July 2023.

Annexes of the Report of the First Consultation Session

Annex I: WMRA Strategy

Annex II: Operationalized Indicators

Annex III: List of Participants of the First Consultation Session

#	NAME	Title/Organization	E-MAIL	Mobile Phone
1	Ms. Salma Sabri	Strategic Planning, Evaluation and Learning Consultant		
2	Ms. Doaa Ahmed	WMRA		
3	Dr. Khaled El Fara	Consultant, WMRA		
4	Dr. Tarek El-Araby	CEO, WMRA		
5	Dr. Nagwa El-Karawy	Senior Advisor to Minister of Environment, WMRA		
6	Dr. Hossam Allam	Regional Director for Sustainable Growth, CEDARE		
7	Ms. Ghada Moghny	Senior Programme Coordinator, CEDARE		
8	Ms. Salma Nooh	Junior Programme Coordinator, CEDARE		

2. Report of the Second Consultation Session on July 26th, 2023

I- Introduction to the Assignment

This assignment falls within the context of the policy component of the SwitchMed Project. Waste management is one of the four sectors that were selected in the SCP National Action Plan in Egypt. This action plan has been developed in cooperation with the Ministry of Environment, UNEP/SwitchMed, and CEDARE, and has been funded by the European Commission. SwitchMed has contributed to highlight the importance of regulations for waste management especially with the demonstration project on reducing the consumption of single-use plastic bags. Egypt issued Law No. 202 of 2020 for Integrated Waste Management and its Executive Regulations No. 722 of 2022.

The Waste Management Regulatory Authority (WMRA) has identified the need for technical support to develop the following milestones in the law and its executive regulations:

- The National Strategy for Integrated Waste Management (Article 5).
- Key performance indicators (KPIs) for monitoring, follow-up, and evaluation of waste management activities (Article 7).
- Consolidated lists of hazardous materials and waste.
- Guidelines for the collection, transportation, storage, treatment, and final safe disposal of all types of hazardous waste (industrial – petroleum, etc.).
- Guidelines for the Handling of Hazardous Materials from Transport and Storage (Article 47).
- Reviewing guidelines for receiving, treating, and disposing of non-hazardous waste (Article 25).

II- Assignment Objective

The aim of this assignment is to assist WMRA in fulfilling its function according to the Integrated Waste Management Law by developing key performance indicators that can help in monitoring and managing the waste management activities in Egypt.

The KPIs will serve accountability, transparency, results-based management and most importantly learning purposes.

This should be achieved through holding up to two in-depth consultation sessions with WMRA and CEDARE. This report describes the output of the second consultation session held on July 26th, 2023.

III- Workshop's Methodology

The workshop used different teaching aids and tools (presentation, board activities, group work, etc.) to achieve its objectives. It was stressed several times by the moderator that it is an interactive and participatory workshop where participants can share their input to design the indicators.

IV. Meeting's Output

Meeting Date and Time: 26.07.23 from 10:00-16:30 Cairo time.

Meeting's Form and Venue: One-day workshop at Intercontinental City Stars, Citadel Hall.

Meeting's Participants: 12 participants, out of whom 5 belong to WMRA ([refer to Annex II for the List of Participants](#)).

The main aim of the second consultation session is as follows:

- Follow up on the first consultation session agreement.
- Discuss WMRA's workplan and future role.
- Discuss criteria for selecting indicators.
- Indicators' selection for WMRA.
- Agreement on next steps.



The workshop achieved its objective by designing KPIs for WMRA's current workplan based on current regulations and laws governing its mandate.

To understand the objective and context of the planned consultation session, CEDARE team started the workshop by providing a brief overview of the history of SwitchMed I and II, the key achievements and challenges. This context was important to understand the role of this assignment in the project.

Second, a brief introduction was provided on the following topics to facilitate group work and have a common understanding:

- Criteria for selecting KPIs.
- Types of indicators.
- International Standard Indicators and component of a robust Solid Waste Management System based on "Waste Aware Benchmark Indicators for Integrated Sustainable Waste Management in the Cities", published by Leed University in 2014.

Third, the strengths and weaknesses of the current workplan submitted by WMRA were presented as the basis for the discussion. The workplan has five main components to achieve WMRA's mandate. The first two components focus on WMRA's internal reform process as "planning and coordinating agency" to comply its operations with the new Solid Waste Management regulations, making sure that other implementing partners comply too. The three remaining components focus on WMRA's role as "regulatory and monitoring agency" for the whole integrated Solid Waste Management System in Egypt.

Fourth, KPIs were proposed for each component, thoroughly discussed and amended in group work.

The main output of this workshop is developing 25 KPIs for the five strategic components of WMRA's current workplan. Indicators have been categorized and assigned to each component based on discussions and agreements. Indicators belonging to the Ministry of Environment's strategy were also embedded in the workplan to ensure reporting on, while highlighting WMRA's contribution to the overall sector strategy. It was also agreed that the timeframe of the updated workplan would be from 2023 to 2026.



V. Meeting's Agreements and Next Steps

Agreement/Task	Responsibility	Status
Send the updated workplan of WMRA	Salma Sabri	Done
Document workshop's output	Salma Sabri	Done
Investigate and communicate the end date of the workplan	WMRA	In progress
Prepare a presentation on assignment result	Salma Sabri	Deadline 15.08.23

Annexes of the Report of the Second Consultation Session

Annex I: Agenda



SwitchMed II project in Egypt
Date: 26/07/2023

Second Consultation Session on Developing Key Performance Indicators (KPI) for monitoring, follow-up, and evaluation of waste management activities

July 26th, 2023 – Intercontinental City Stars – Citadel Hall

Assignment Objective: Assist WMRA in fulfilling its function by proposing KPIs that can help in monitoring Waste Management Activities

Workshop Objectives and Results

- Discuss WMRA's workplan and future role
- Discuss criteria for selecting indicators
- Indicators' selection for WMRA
- Agreement on next steps

AGENDA

Time	Topic
10:00 - 12:00	Kick Off Session Welcome Note by CEDARE Workshop Objective Criteria for Selecting Indicators
Coffee Break 12:20-12:30	
12:30 - 15:00	Discussing WMRA's workplan Assigning Indicators to WMRA's mandate Next Steps
Lunch 15:00 – 16:00	






5

Annex II: List of Participants of the Second Consultation Session

#	NAME	Title/Organization	E-MAIL	Mobile Phone
1	Salma Sabri	Strategic Planning, Evaluation and Learning Consultant		
2	Ahmed Saad Aly	WMRA		
3	Doaa Ahmed Barbary	WMRA		
4	Dr. Khaled El Fara	Consultant, WMRA		
5	Dr. Tarek El-Araby	CEO, WMRA		
6	Eman Ahmed	Assistant to CEO, WMRA		
7	Hossam Allam	Regional Director for Sustainable Growth, CEDARE		
8	Ghada Moghny	Senior Programme Coordinator, CEDARE		
9	Salma Nooh	Junior Programme Coordinator, CEDARE		
10	Lamia Nabil	Admin & Communication Officer		
11	Terry Fahmy	Regional Programme Specialist		
12	Samir Sayed	IT support, CEDARE		

Annex III: Presentation of the Second Consultation Session

1

SwitchMed Project
 to accelerate the implementation
 of Sustainable Consumption and Production,
 Circular Economy and Blue Economy

Second Consultation Session
 Assisting WMRA in fulfilling its
 mandate

2



CONSULTATION SESSION II OBJECTIVE

Assist WMRA in fulfilling its function by proposing KPIs that can help in monitoring waste management activities

- Discuss WMRA's workplan and future role
- Discuss criteria for selecting indicators
- Indicators' selection for WMRA
- Agreement on next steps

RESULTS OF 1ST CONSULTATION SESSION

- Presentation of previous developed strategy for WMRA
- Narrow down scope of work and agree on support area
- Designation of focal point
- Documents sharing



INDICATORS SELECTION CRITERIA

- المؤشر دليل يشير إلى مدى التقدم المحرز نحو تحقيق النتيجة المتوقعة/المخطط لها في وقت معين.
- في حال استخدام المؤشر من قبل عدة أشخاص فإنهم سيحصلون على نفس نتيجة القياس.
- إن قياس المؤشرات الكمية أكثر سهولة من قياس المؤشرات النوعية، وغالبا ما يكون استخدام أكثر من مؤشر أفضل من أجل الحصول على صورة كاملة، لكن يجب تجنب استخدام عدد كبير من المؤشرات لأن ذلك سيتطلب وقتا وجهدا أكبر في عملية جمع وتحليل البيانات.
- ترتبط المؤشرات ارتباطاً مباشراً بالنتائج التي تحاول قياسها .
- براعي أن يكون هناك ثلاثة مؤشرات بحد أقصى لكل نتيجة.



INDICATORS SELECTION CRITERIA

- Indicators give measurable indication based on proof on how far we have reached the objective
- If indicators are measured by two persons, results will be same
- For each objective, three indicators maximum should be chosen
- Measuring and reporting on quantitative indicators is easier than qualitative indicators
- Indicators are directly related to objectives and need to be translated to ACTIVITIES and MILESTONES



TYPES OF INDICATORS

مؤشرات كمية (Quantitative)	مؤشرات كمية (Quantitative)
قياسات كمية تتضمن البيانات الإحصائية	قياسات كمية تتضمن البيانات الإحصائية
<ul style="list-style-type: none"> • جودة • مستوى رضاء • مدى تأثير..... • درجة مشاركة • مستوى مهارة.... 	<ul style="list-style-type: none"> • عدد • أطوال • أحجام • معدل / مرات تكرار • نسبة

إن قياس المؤشرات الكمية أكثر سهولة من قياس المؤشرات النوعية، وغالبا ما يكون استخدام أكثر من مؤشر أفضل من أجل الحصول على صورة كاملة



INDICATORS SELECTION CRITERIA

• الصلاحية (علاقة المؤشر بالنتيجة أو الهدف أو الانشطة)

- هل المؤشر يقيس مدى التقدم في تحقيق الهدف
- هل الهدف واضح ومحدد وواقعي من حيث إمكانية تطبيقه وحاجة المجتمع ورغبته له وارتباطه بتوجه الدولة /استراتيجية
- هل توجد أشياء أخرى (بخلاف الهدف) تؤثر على المؤشر

• إمكانية إعادة القياس (الاعتمادية)

- هل يمكن إعادة قياس المؤشر

• إمكانية الاستخدام

- هل البيانات والمعلومات المرتبطة بالمؤشر تصلح/تكفي كأساس لاتخاذ القرارات



INDICATORS SELECTION CRITERIA

• الفاعلية من حيث التكلفة

- هل نستطيع دفع تكلفة جمع البيانات
- هل تساوي التكلفة قيمة البيانات والمعلومات
- هل يمكن تقليل التكلفة (باستخدام مؤشرات أخرى)

• البساطة

- بساطة طرق جمع البيانات
- بساطة الحصول على مصادر المعلومات
- هل يمكن استخدام الموارد البشرية المحلية



Wasteaware Benchmark indicators for Integrated Sustainable Waste Management in the Cities, Leed University



GROUP WORK

- +ve Availability of Work Plan
- +ve Availability of essential components
- +ve Reporting on activities
- +ve Acknowledgement of cooperation

Challenges:

- Outdated data
- Activities versus source of verification
- Technical problems
- No indicators/milestones




11

عملية تحديد الاستراتيجيات والسياسات و/أو الأنشطة المطلوبة لإدارة قطاع المخلفات بكفاءة و لتحقيق الهدف المنشود.

التعاون مع الوزارات والمحافظات والجهات المعنية في إعداد السياسات والمخططات الاستراتيجية لإدارة الأنواع المختلفة للمخلفات وذلك على المستوى الوطني (مهمة 2)

مجموعة الأنشطة أو اللوائح والشروط التي تحكم إجراء أو سلوكاً معيناً. ويتم ذلك لضمان حماية حقوق مقدمي وملتقي الخدمات، وتعزيز الكفاءة في قطاع إدارة المخلفات على سبيل المثال:

تنظيم وتنسيق الأدوار والمسؤوليات بين مختلف الفاعلين في منظومة إدارة المخلفات وفقاً لأحكام القوانين والقرارات واللوائح السارية في هذا الخصوص (مهمة 1)



متابعة وتقييم

وللجهاز دور في متابعة وتقييم التنفيذ، وهو التأكد أن التنفيذ يحقق الأهداف والاستراتيجيات ويتم في إطار السياسات الموضوعية إلى جانب توفير متطلبات التنفيذ. على سبيل المثال:

متابعة الجهات المرخص لها بمباشرة أنشطة إدارة المخلفات لتقييم أدائها بصفة دورية (مهمة 19)


12

MISSION & VISION

رؤية استراتيجية 2030

"أن يكون البعد البيئي محور أساسي في كافة القطاعات التنموية والإقتصادية بشكل يحقق أمن الموارد الطبيعية ويدعم عدالة إستخدامها والإستغلال الأمثل لها والإستثمار فيها وبما يضمن حقوق الأجيال القادمة فيها، ويعمل على تنويع مصادر الإنتاج والأنشطة الإقتصادية، ويساهم في دعم التنافسية، وتوفير فرص عمل جديدة، والقضاء على الفقر، ويحقق عدالة إجتماعية مع توفير بيئة نظيفة، صحية وأمنة للإنسان المصري"

رؤية استراتيجية القطاع

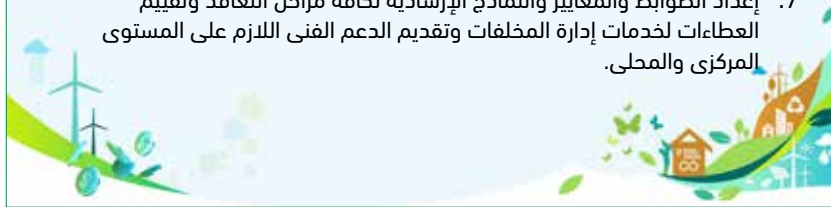
أن تكون منظومة إدارة المخلفات الصلبة مستدامة ومنظمة و نشطة اقتصادياً. تعمل على رفع جودة حياة المواطن المصري

رؤية الجهاز المقترحة

جهاز كفاء وفعال قادر على قيادة وتنظيم قطاع المخلفات بالتعاون مع كافة المعنيين لإدارتها إدارة متكاملة ومستدامة

TASKS

1. تنظيم وتحديد الأدوار والمسؤوليات بين مختلف الفاعلين في منظومة إدارة المخلفات وفقا لأحكام القوانين والقرارات واللوائح السارية في هذا الخصوص.
2. التعاون مع الوزارات والمحافظات والجهات المعنية في إعداد السياسات والمخططات الإستراتيجية لإدارة الأنواع المختلفة للمخلفات وذلك على المستوى الوطنى.
3. إعداد مقترح تطوير وتحديث التشريعات والقوانين واللوائح والمعايير والقواعد الفنية التي تنظم أسلوب الادارة المتكاملة للمخلفات.
4. إتاحة البيانات والمعلومات المتعلقة بقطاع المخلفات.
5. تقديم خدمات الاستشارات الفنية والتوصيات للسلطات المختصة وكذلك الفاعلين في منظومة إدارة المخلفات.
6. إصدار الأدلة الإرشادية اللازمة لتنفيذ المخططات الإستراتيجية على مستوى المحافظات.
7. إعداد الضوابط والمعايير والنماذج الإرشادية لكافة مراحل التعاقد وتقييم العطاءات لخدمات إدارة المخلفات وتقديم الدعم الفنى اللازم على المستوى المركزى والمحلى.



TASKS

- 8-اعداد مؤشرات الأداء الرئيسية لرصد ومتابعة وتقييم الأعمال بإدارة المخلفات.
- 9-تشكيل لجنة لفحص شكاوى مقدمى الخدمات والجهات المتعاقدة معها واقتراح الحلول لحل الشكاوى.
- 10-إعداد خطة لتدريب وبناء القدرات الفاعلين في منظومة إدارة المخلفات.
- 11-تقديم الدعم الفنى لبرنامج رفع الوعى العام والالتزام المجتمعي.
- 12-اقتراح الآليات الاقتصادية والمالية اللازمة لتحقيق أهداف الإدارة بالتعاون مع الجهات المعنية.
- 13-إعداد الدراسات الفنية واقتراح آليات تحديد رسوم تعريفه خدمات الإدارة المتكاملة للمخلفات.
- 14.خلق الفرص الاستثمارية فى مجال إدارة المخلفات.
- 15-إعداد الدراسات للمشروعات والمبادرات الرائدة والتجريبية لتطوير منظومة إدارة المخلفات وتوفير التمويل لها.



TASKS

16- تشجيع إجراءات البحوث والدراسات التطبيقية والمبادرات الفردية والمؤسسية التي تساهم في تحسين وتطوير الأداء بإدارة المخلفات والتعاون مع الجهات الخارجية في تحقيق ذلك في كافة مجالات وخطوات إدارة المخلفات.

17- اعتماد التكنولوجيا الخاصة بعمليات معالجة وتدوير المخلفات بالتنسيق مع الوزارات والجهات المعنية.

18- تقديم الدعم الفني وإعداد الإشتراطات العامة والقواعد والإجراءات اللازمة للحصول على تراخيص بمزاولة الأنشطة المتعلقة بإدارة المخلفات بما لا يخل بأحكام القانون.

19- متابعة ومراقبة الجهات المرخص لها فيما تباشره من أنشطة إدارة المخلفات لتقييم أدائها بصفة دورية.

20- اقتراح مشروعات القوانين والقرارات اللازمة للانضمام إلى الاتفاقيات الدولية والإقليمية المتعلقة بالمخلفات، وكذلك التنسيق مع الجهات الدولية المانحة فيما يتعلق بمشروعات المخلفات بالتعاون مع الوزارات والجهات المعنية.



WORKING GROUP

- Time Frame of Planning
- Update and Reporting on Indicators



3. Final Virtual Meeting on September 21st, 2023

A final virtual meeting was held with representatives from WMRA on the 21st of September 2023. The main aim of the last meeting was as follows:

- To present the assignment's deliverables and receive WMRA's final feedback and approval.
- To agree on and approve the Minister's presentation content.
- To agree on next steps and actions to be taken and report distribution plans.

Annex I: List of Participants of the Final Meeting on September 21st, 2023

#	NAME	Title/Organization	E-MAIL	Mobile Phone
1	Ms. Salma Sabri	Strategic Planning, Evaluation and Learning Consultant		
2	Ms. Doaa Ahmed Barbary	WMRA		
3	Dr. Khaled El Fara	Consultant, WMRA		
4	Dr. Tarek El-Araby	CEO, WMRA		
5	Dr. Hossam Allam	Regional Director for Sustainable Growth, CEDARE		
6	Ms. Ghada Moghny	Senior Programme Coordinator, CEDARE		
7	Ms. Salma Nooh	Junior Programme Coordinator, CEDARE		

