



STAKEHOLDER CONSULTATION – MAIN RESULTS

Regional activity on Best practices in promoting circular economy and achieving waste reduction in the Mediterranean

Activity No: RE-7-REG

May 2021

COMPONENT	Component 1 (Environment)
WES TOPIC:	Circular Economy Prevention and reduction of pollution reaching the Mediterranean from specific industrial sectors
WES SUBTOPIC	Waste management schemes and streams Promoting PPP & Access to sustainable investment
DIMENSION	Technical Assistance & Capacity Building



STAKEHOLDER CONSULTATION – MAIN RESULTS

INTRODUCTION

The WES RE-7-REG activity aims to identify, document, and disseminate key best practices to improve the implementation of the 3Rs for municipal waste in eight countries of the southern Mediterranean: Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, and Tunisia.

To ensure that the activity is relevant and useful to the different target audiences of the project (National authorities, local authorities, waste utility companies, etc.), a stakeholder consultation has been conducted. The main objectives were:

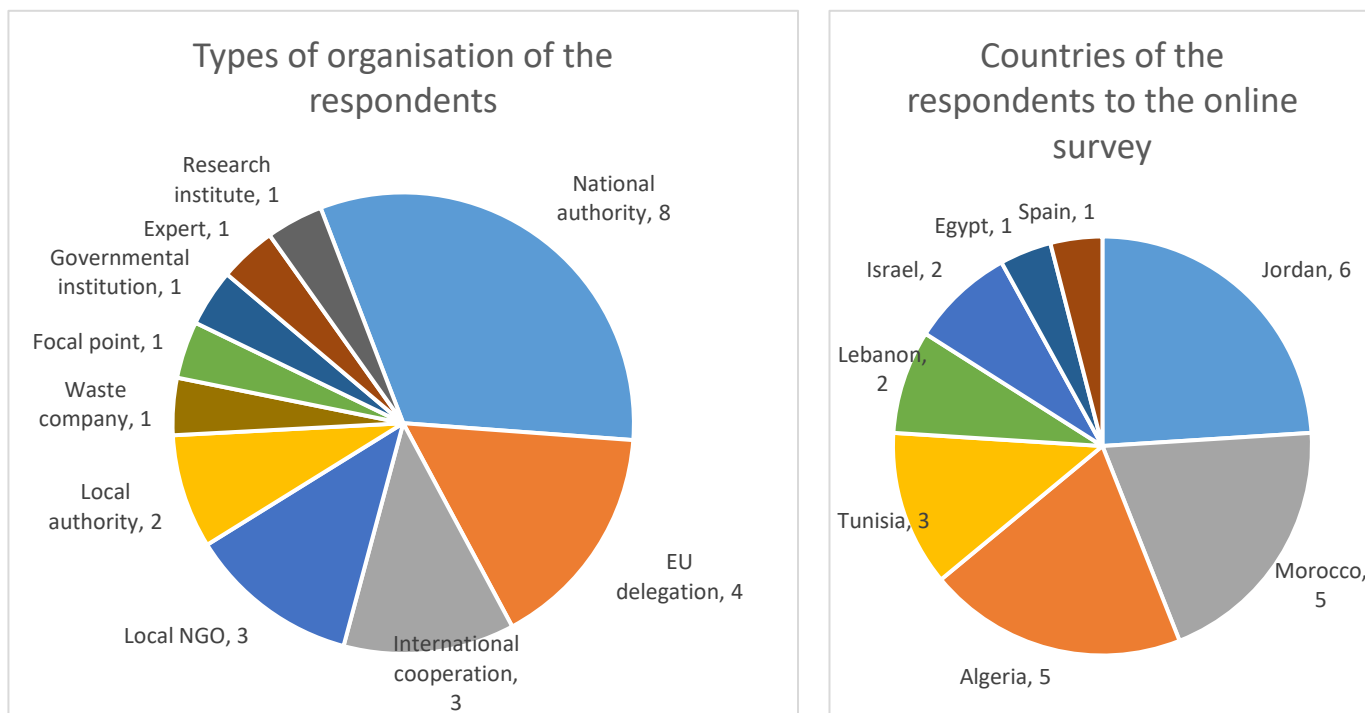
- To get a good overview on the key priorities, challenges, and needs of the different stakeholders in the eight countries;
- To collect information on existing good practices and frontrunners.

The stakeholder consultation was centred on an online survey, available in English and French, asking questions on the different points mentioned above. In addition, a series of interviews were conducted among various stakeholders in the different countries, to get further input and collect more qualitative information. The organisations that provided input are presented in Annex 1.

RESPONDENTS TO THE SURVEY AND INTERVIEWS

In total, 25 organisations responded to the online survey or to the interviews: 18 organisations filled the online questionnaire, and 10 interviews were conducted (3 organisations provided input with both the questionnaire and an interview). The types of organisations and countries of the respondents are quite diverse, as presented in the graphs below:

TABLE 1: TYPE OF ORGANISATIONS AND COUNTRIES OF THE RESPONDENTS TO THE CONSULTATION



The stakeholder consultation permitted WES to reach very different types of players, with the majority being national authorities, EU delegations, and organisations in charge of international cooperation among the respondents. All target countries were covered but Palestine. One respondent was located in Spain, but provided input on priorities and key challenges for the area targeted by the WES project. The nature of the information retrieved with the online survey were slightly different from that retrieved with the interviews, even if the same general questions were asked: the survey provided more generic replies, while interviews provided more qualitative comments concerning the difficulties with framework conditions or more specific concerns on municipal waste management.

The replies generally reflect the perspective of the respondents, and their own priorities. However, the cross-analysis of the different replies highlights the most relevant priorities and topics of interest in the countries targeted by the activity.

PRIORITIES IDENTIFIED

The questions addressed the following elements:

- Priority waste fractions
- Priority sectors
- Main weaknesses for municipal waste management
- Main interests for best practices.

PRIORITY WASTE FRACTIONS

Respondents were asked to list the key priority fractions for the implementation of the 3Rs for municipal waste. In the online survey, 4 waste fractions were specified: biowaste, paper and packaging waste, WEEE, and residual waste.

The graph below shows the number of respondents that indicated the different waste fractions as priorities:

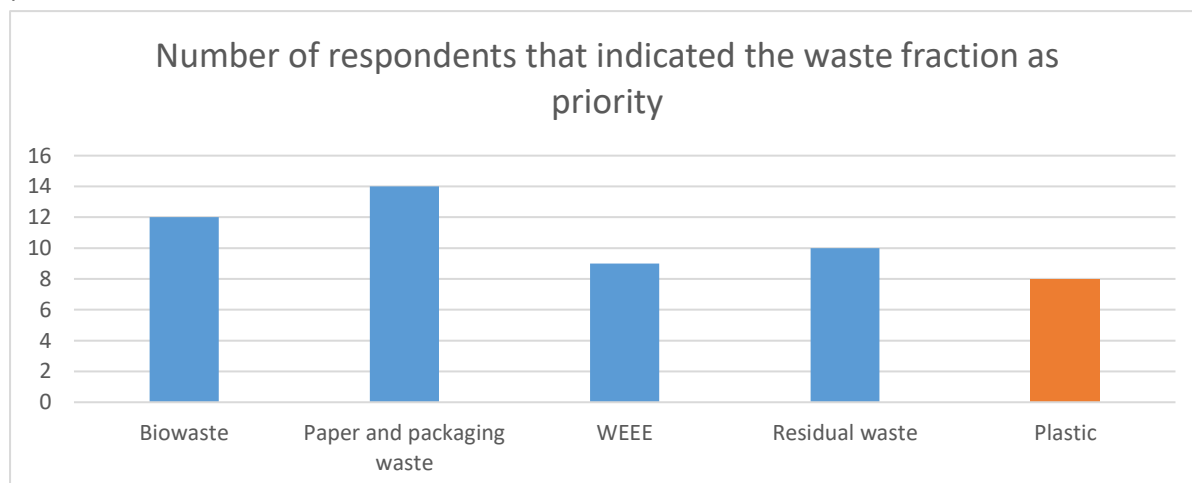


FIGURE 1: NUMBER OF RESPONDENTS THAT INDICATED THE DIFFERENT WASTE FRACTIONS AS PRIORITY

Both biowaste and paper/packaging waste are the main waste fractions, being reported by 12 and 14 respondents, respectively. Residual waste and WEEE are also regarded as priority fractions by



respectively 10 and 9 respondents. Many respondents, especially interviewees, highlighted “plastic waste” as a key priority, especially plastic bags and plastic packaging, even though it was not one of the fractions that was selectable in the online form. Plastic waste is regarded as a major source of pollution in several target countries, possibly linked with the lacking collection infrastructure. Besides, some respondents did not specifically mention priority fractions.

The priority fractions vary from one country to another, as shown in the graph below. Biowaste is highlighted by several respondents in Algeria, Jordan, and Tunisia, and paper/packaging waste is reported in Tunisia, Jordan, and Israel. Residual waste and plastic waste are also waste fractions that are reported in every target country. The priority fractions might also reflect the perceptions of the respondents.

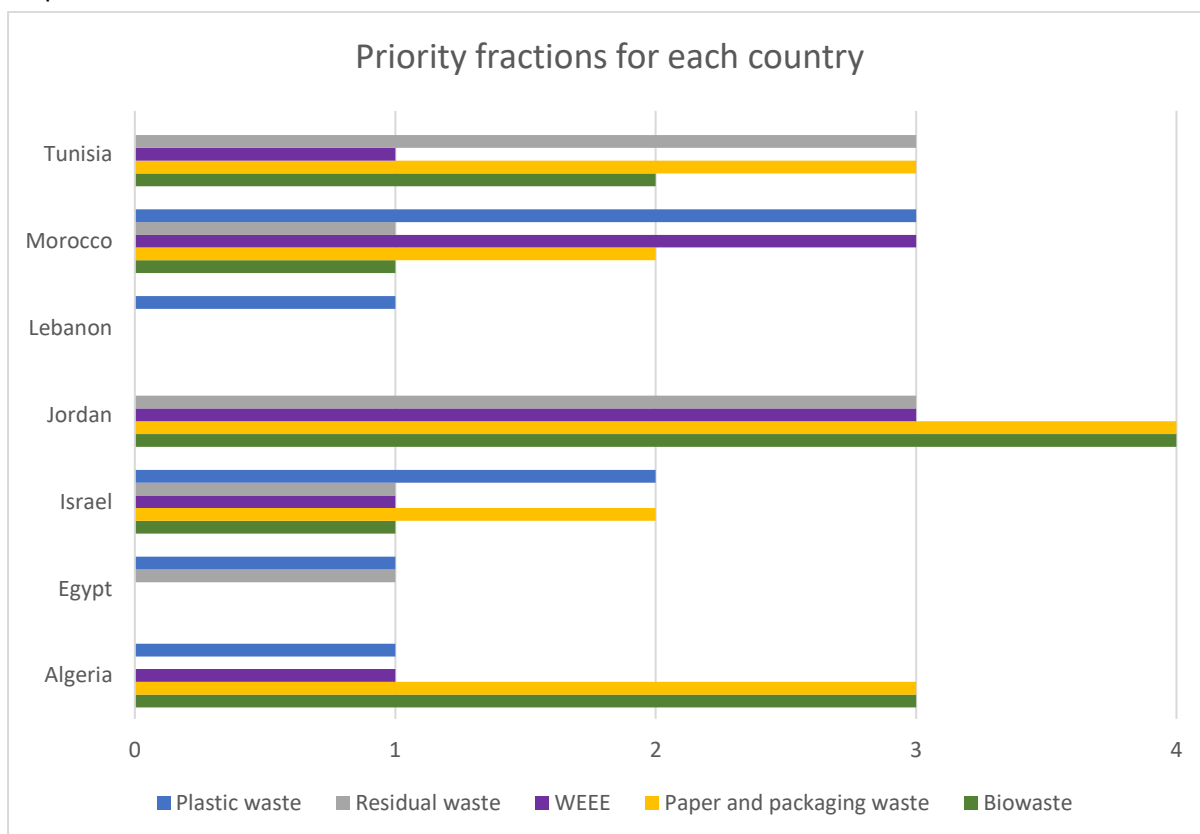


FIGURE 2: PRIORITY FRACTIONS PER TARGET COUNTRY

Interestingly, two interviewees (from Jordan and Lebanon) indicated that there are no key priority fractions at the moment, and that the first priority was to ensure a proper collection and management of municipal waste, before developing source separation.

Regarding priority fractions, the following observations were made by respondents:



TABLE 2: SUMMARY OF THE KEY FRACTIONS PER TARGET COUNTRY

Target country	Observation on key fraction
Algeria	Most respondents indicated biowaste and paper/packaging waste as priority fractions. Plastic waste has been highlighted by the National Waste Agency as a key working topic, especially regarding marine pollution, to assess the source of pollution.
Egypt	The interviewee mostly focused on collection and disposal of mixed waste. However, single-use plastic bags were also mentioned as a fraction to be banned.
Israel	The respondents all indicated paper and packaging waste, and especially plastic waste, as key priorities. Biowaste and WEEE were mentioned as well by one of the respondents.
Jordan	Respondents highlighted biowaste, paper/packaging waste, and residual waste as priority fractions. One respondent mentioned that the current priority concern was to improve the collection infrastructure and rehabilitate the landfills, before starting source-separation.
Lebanon	Plastic was particularly mentioned by the respondents, and more generally paper and packaging waste. The need to reduce the generated quantities of plastic bags and to find alternative was highlighted by one of the interviewees.
Morocco	The most commonly reported waste fraction is plastic waste. Also, paper and packaging waste and WEEE were reported by two different respondents, and biowaste by one. Interviewees insisted on plastic waste and highlighted the lack of regulation on plastic products and plastic waste.
Tunisia	Residual waste and paper/packaging waste were reported by all respondents, and biowaste by most of them. Plastic waste was mentioned by both interviewees.

There are some slight differences among the target countries, reflecting different level of progress and national priorities, yet the key target fractions seem to be:

- **Paper and packaging waste**, especially **plastic waste and plastic bags**;
- **Biowaste**;
- **Residual waste**, especially for areas where collection infrastructures are underdeveloped, or where disposal sites need to be rehabilitated.

These different waste fractions might be associated with different instruments and policies: for instance, most respondents reporting plastic bags mentioned bans or taxes to reduce waste generation.



PRIORITY SECTORS

The sectors reported by the respondents are presented in the graph below:

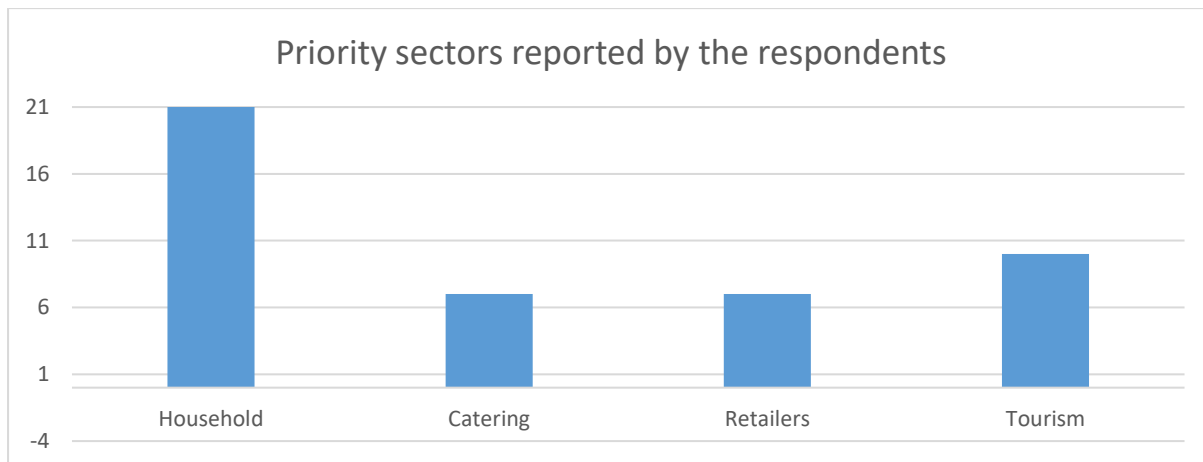


FIGURE 3: SECTORS REPORTED AS PRIORITY BY THE RESPONDENTS

Most respondents indicated households are priority sectors, and 10 of them also reported tourism (mostly from Tunisia, and Jordan). Catering and retailers were proposed by 7 respondents. Several interviewees did not indicate any specific priority sector, and mostly addressed municipal waste (i.e., household waste and similar commercial waste) as a whole. Few interviewees reported priority sectors (some mentioned tourism, e.g. with hotels and restaurants).

Several respondents also indicated other sectors, such as agriculture, construction and demolition, and industries. These sectors are out of the scope of the study that focuses on municipal waste.

Therefore, the main waste producers to be considered as priority are **households and tourism**. Tourism covers the hospitality sector, as well as waste collection in touristic public areas.

MAIN WEAKNESSES

The online questionnaire included a question on the main identified weaknesses regarding the implementation of the 3Rs for municipal waste. The results are presented in the graph below:

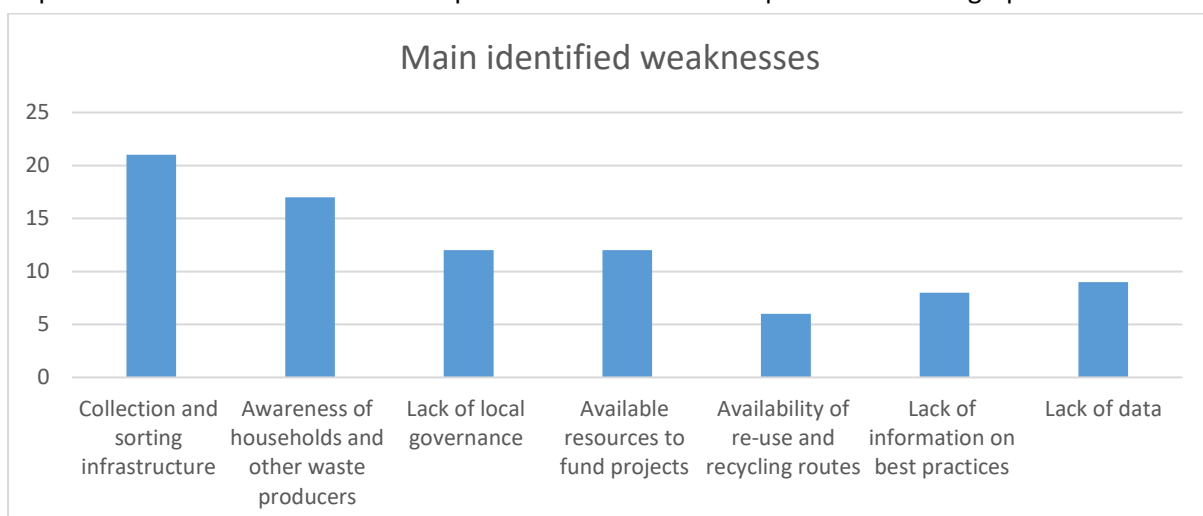


FIGURE 4: MAIN WEAKNESSES IDENTIFIED BY THE RESPONDENTS OF THE ONLINE SURVEY



The main identified weakness is the **lack of collection and sorting infrastructure**, followed by the **lack of awareness of waste producers**, and the **lack of available resources to fund new projects**, and the **lack of local governance** including the lack of local capacity and knowledge. Other weaknesses were reported by several respondents, such as the lack of available resources.

Interviewees offered other challenges, among which some that were mentioned several times:

- The lack of regulation or of enforcement/control by the national government;
- The lack of knowledge and technical capacity at local level;
- The need to better include and professionalize the informal sector to improve their working condition and their contribution to sorting targets.

More detailed findings for each target country is presented below:

TABLE 3: SUMMARY OF THE KEY CHALLENGES PER TARGET COUNTRY

Target country	Observation on key challenges
Algeria	The two main reported challenges are the lack of collection/sorting infrastructure and the lack of awareness of waste producers. Collection was reported as the main bottleneck by one respondent. Interviewees also highlighted the design of sorting centres, private autonomous financing of waste, and marine litter as key challenges.
Egypt	The interviewee mentioned the informal sector and the rehabilitation of landfills as two priorities. He also indicated that inhabitants might be more motivated by the reduction of littering than by waste prevention.
Israel	The interviewees mentioned the following key points: the need for more recycling infrastructure (mainly for organic), the need for a better national legislation and targets for recycling, and the need for promoting reduction at source and dealing with single-use plastics.
Jordan	Collection and sorting infrastructures, and the lack of knowledge on good practices, were two of the most reported weaknesses among the respondents. At local level, the low capacity and awareness of municipalities was highlighted. The implementation of the 3Rs is still at a very early stage, and informal waste pickers do most of the sorting.
Lebanon	The low awareness of waste producers and the lack of resources to fund new projects were mentioned as the key challenges. Otherwise, interviewees mentioned the lack of a proper legal framework and of power to enforce the law. Besides, the recent explosion in Beirut destroyed one of the two sorting lines.
Morocco	The lack of local governance is the weakness that was the most commonly reported by respondents. Other weaknesses were mentioned, such as the lack of regulation on plastics, and the proper involvement of the informal sector.
Tunisia	Most respondents pointed out the lack of collection and sorting infrastructure as the main weakness. Interviewees mentioned the lack of commitment of the private waste sector to pay fees on products/waste.

KEY TOPICS OF INTEREST

Respondents were also asked about their key topics of interest for the collection and presentation of best practices foreseen by the activity. The main results are presented in the graph below:

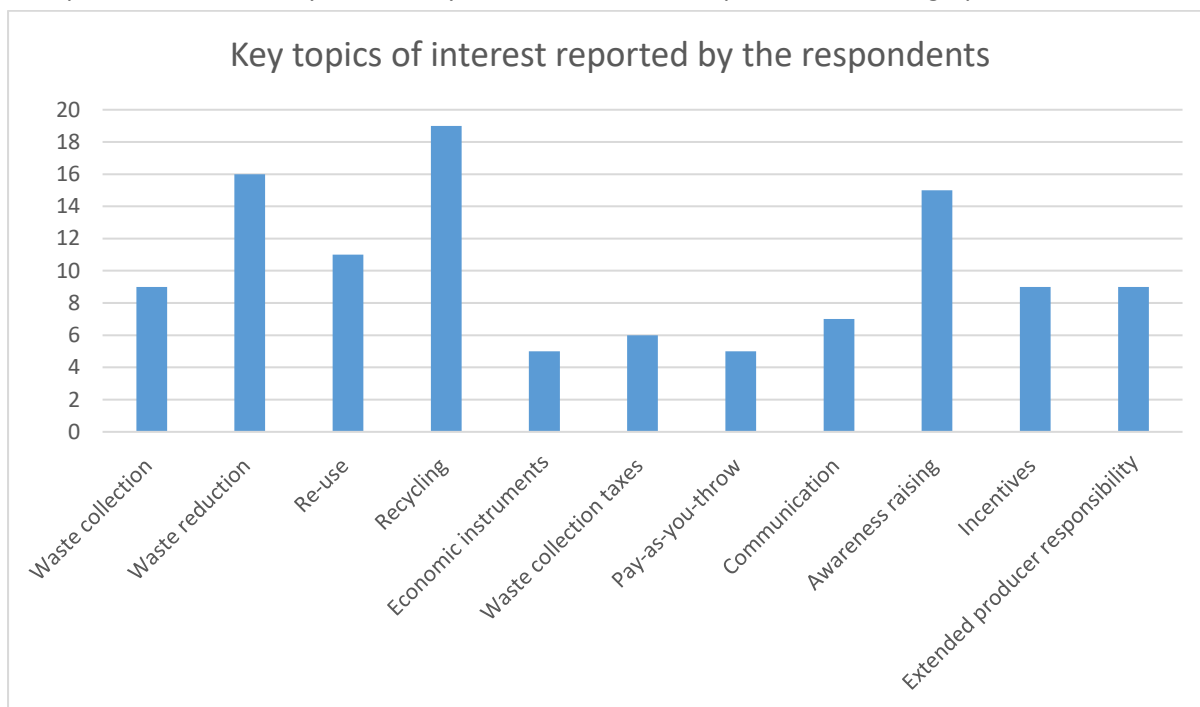


FIGURE 5: KEY TOPICS OF INTEREST REPORTED BY THE RESPONDENTS

The top preferences are **recycling**, **waste reduction**, and **awareness raising**. Other topics were reported by many respondents: **waste collection**, **re-use**, **incentives**, and **EPR schemes**.

Interviewees mostly mentioned **the informal sector**, and the **economic balance of waste management**.

TABLE 4: MAIN OBSERVATION ON KEY TOPICS OF INTEREST FOR EACH TARGET COUNTRY

Target country	Observation on key topics of interest
Algeria	Recycling and awareness raising are the topics that were reported the most. Communication and waste reduction were also reported by most of the respondents. Interviewees also reported the need to update waste management plans, and to increase private autonomous financing of waste. One interviewee indicated that the main bottlenecks are at collection level.
Egypt	The following key topics were reported: waste collection, awareness raising, the involvement of the informal sector, and the need to improve the capacity of the private sector for waste management.
Israel	Waste reduction, recycling, and waste collection taxes are indicated as key topics of interest. Interviewees also mentioned a legislation on single-use plastics.
Jordan	The most commonly mentioned topics of interest are waste reduction, recycling, and awareness raising. The informal sector was also mentioned by interviewees.

Lebanon	Waste reduction, awareness raising and incentives were mentioned as key topics of interest. One interviewee indicated that recycling might not be regarded as a key priority, yet the potential incomes from sorted materials are regarded as a good potential to reduce waste management costs.
Morocco	Recycling and communication are the two most common topics of interest. The informal sector was also mentioned by interviewees.
Tunisia	Recycling is the most commonly mentioned topic of interest, followed by waste reduction and re-use

CONCLUSIONS ON KEY PRIORITIES AND TOPICS OF INTEREST

Based on the main reported weaknesses and key topics of interest, it appears that the best practices to be collected with this activity should focus on the following points:

- **Key fractions: biowaste, packaging waste, and plastic waste** in general. Specific actions targeting SUP and plastic bags should be included (e.g., reduction at source and prevention of littering). In addition, actions focusing on waste collection in general (e.g., of residual waste) might be included.
- **Key sectors: household waste** is the main concern. However, specific actions targeting **tourism and the hospitality sector** can be considered.
- **Key topics:** the following topics should be considered:
 - **Local actions:** Collection and source separation for recycling; Awareness raising; inclusion of the informal sector; waste reduction and prevention of littering.
 - **Policy instruments:** capacity building of local authorities; economic instruments to finance waste management; regulation targeting single-use plastics.

These parameters will be taken into consideration for the selection of the best practices to be documented.

FOCUS ON CHALLENGES AND NEEDS IN PALESTINE

As indicated above, no feedback could be obtained from organisations from Palestine, despite several contacts and reminders. A recent report¹ lists the main challenges and needs for waste management in the occupied territories:

- **Institutional challenges:**
 - An **incomplete legislative framework**, with no specific regulation focusing on waste, and disconnection between the legal framework and the operational level;
 - A **weak legislation enforcement**, especially in waste fee collection. The polluter pays principle should apply but is hardly controlled.
 - A **lack of waste management standards** for the design and handling of sorting and treatment facilities;
 - **Lack of capacity for the waste management institutions** of staff at national and local level;
 - **Lack of planning operational management and monitoring**
- **Technical challenges:**
 - **Lack of collection infrastructure, and low-quality service** in smaller municipalities
 - **Lack of collection and treatment schemes for special waste**
 - **Poor working conditions of waste workers and waste pickers**
 - **Dependence on external funding**
 - **Limited landfilling capacities and illegal dumpsites**
 - **Limited technical knowledge** on prevention, sorting, and recycling
 - **Lack of public awareness**

The elements listed above match the ones identified in the other target countries, for the most part.

BEST PRACTICES

Respondents provided input on existing good practices in the different target countries. These practices will serve as a basis for the selection of the best practices to be described in the factsheets. This list of good practices will be completed by other good practices identified via other sources (projects, reports, etc.), in the target countries or in Europe, so that the topics of interest mentioned above are covered. The list of reported practices is available [here](#) (access restricted to the project team).

¹ CESVI, 2019, Solid waste management in the occupied Palestinian territory

In total, 32 good practices were reported, but one of them focuses on waste fractions outside of the scope of the project (agri-food waste). Some respondents also reported guidelines or manuals that did not qualify as concrete good practices, and that was regarded as relevant resources to identify further good practices.

The reported practices were listed and shortly analysed to determine their key characteristics and focus, and to identify if they match the interests and challenges presented above. However, it must be noted that the quality of the information provided varies considerably from one practice to another, and for the most part very limited information could be retrieved. Additional research was conducted (e.g., taking advantage of the references provided by the respondents), but limited data could be retrieved to properly assess their relevance. It is likely that this first list will have to be completed with other practices and references to result in 20 relevant and consistent good practices.

The reported practices cover seven out of the eight target countries, with the following distribution:

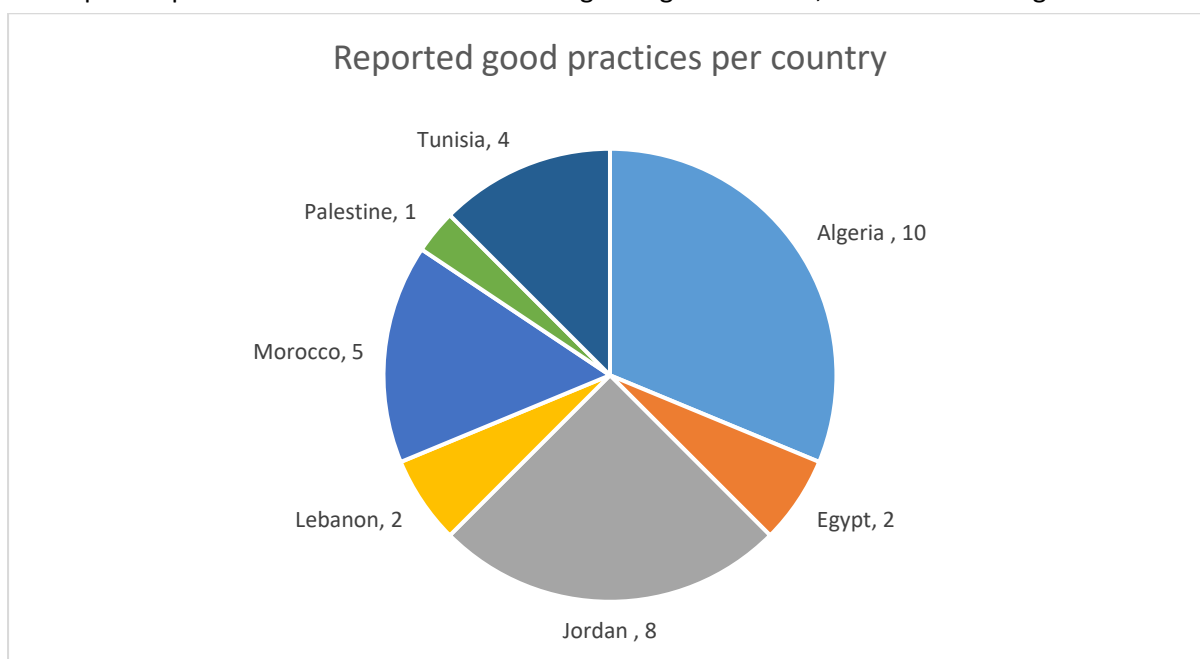


FIGURE 6: REPORTED GOOD PRACTICES BY TARGET COUNTRY

Many practices were reported in Algeria and Jordan, as well as in Morocco and Tunisia. The other three countries are less represented, which might reflect the fact that fewer organisations from these countries took part in the survey and interviews.

The waste fractions covered by the reported practices were also listed, and the number of practices according to the waste fractions that they cover is presented below. Some practices tackle several waste fractions, while others do not specifically target a single waste stream, and they cover all municipal waste.



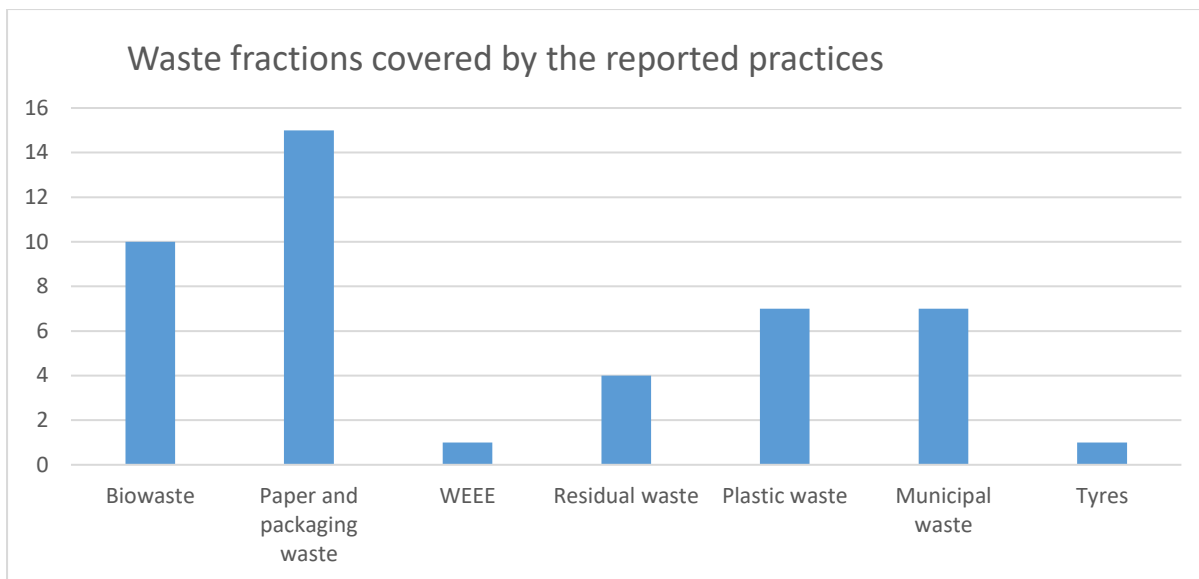


FIGURE 7: NUMBER OF REPORTED PRACTICES PER WASTE FRACTIONS ADDRESSED

Paper and packaging waste is the most represented waste fraction; also, some actions specifically target plastic waste (including plastic packaging such as PET bottles and plastic bags). Biowaste is the second most represented fraction. Most practices focus on such waste, and almost none of them specifically target “occasional waste” such as bulky waste, with only one fraction on WEEE.

The actions were also listed according to the topics that they cover, according to the information available. The following figure presents the number of practices that cover each of the topics at stake:

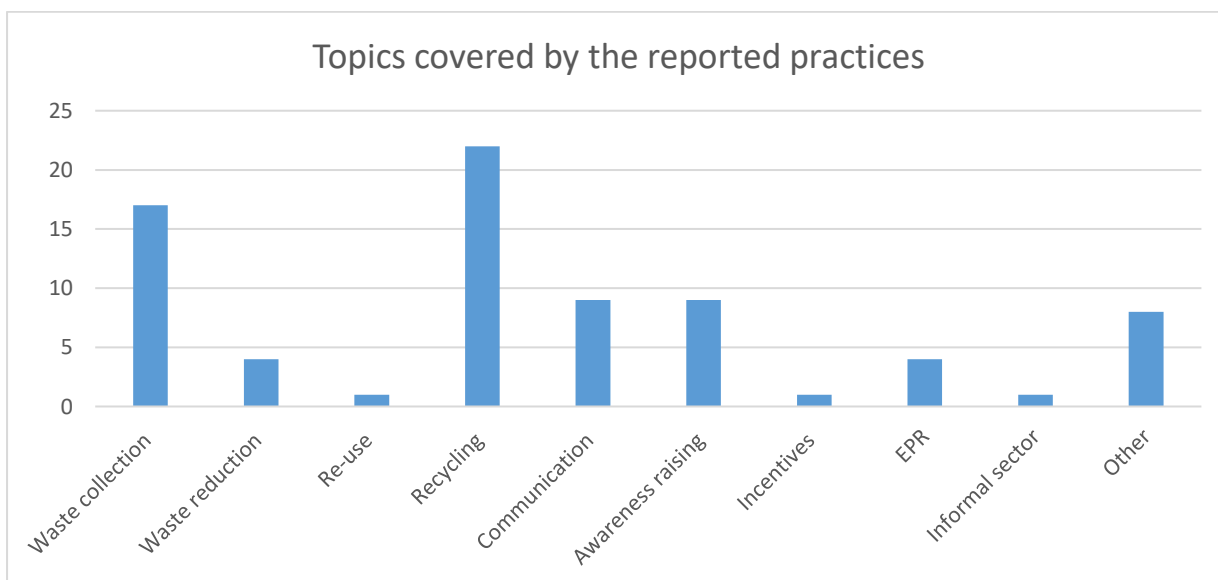


FIGURE 8: NUMBER OF REPORTED PRACTICES PER KEY TOPIC

Most practices focus on waste collection and/or recycling, and many focus on awareness raising and communication activities. Few focus on waste reduction, re-use, and on EPR, while waste collection taxes do not seem to be addressed at all.

Finally, the actions were analysed regarding the context and the target group they tackle. Some practices do not specify any specific context or target group.



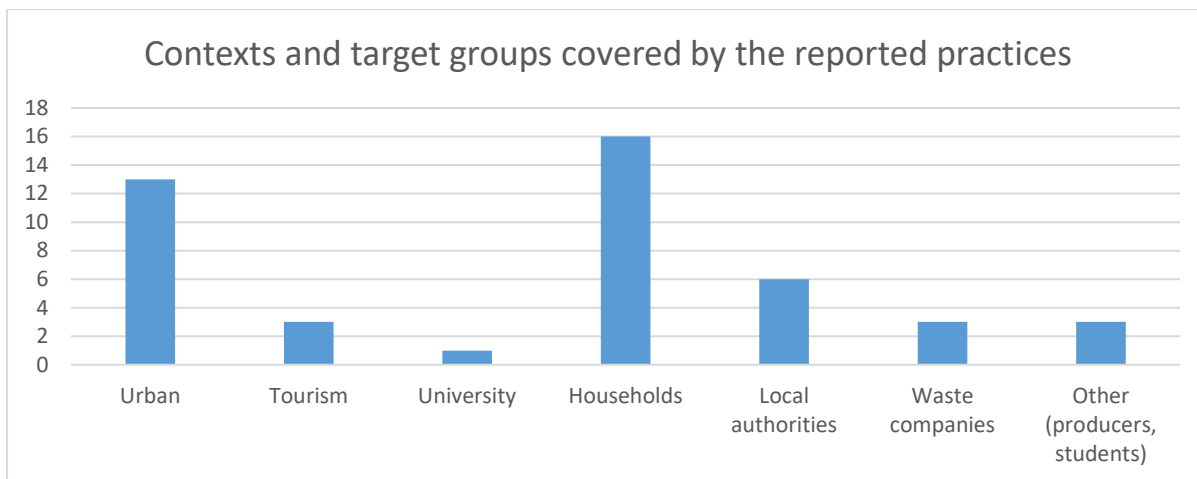


FIGURE 9: NUMBER OF REPORTED PRACTICES PER CONTEXTS AND TARGET GROUPS

Many practices focus on urban areas, and few tackle tourism areas (beaches, etc.). The most commonly found target group is households. Other practices focus on capacity building or training of local authorities (e.g., municipal collection staff) and waste companies (collection and treatment companies). Few practices also address other players such as students or producers that put products on the market.

Overall, this first list of practices seems to cover most of the topics and challenges reported by the respondents, with the following exceptions:

- Only one practice addresses **WEEE**;
- Few practices tackle the inclusion of the **informal sector**;
- Few practices focus on the **economic balance of waste management**, and **economic instruments in general**.

FRONTRUNNERS

Respondents also indicated front-runners whose practices could be investigated. The following list was retrieved:

TABLE 5: FRONTRUNNERS IDENTIFIED BY THE RESPONDENTS

Country	Location (city, region, country)	Name of the organisation	Type of organisation	Actions
Israel	Israel	Ecocean	NGO	Studies on marine litter, educational programmes
Jordan	Amman	BE Company	Waste Management Company	None specified
Jordan	Amman, Jordan	Mustafa Al-Jaar Establishment For Consultations.	Waste Management Company	None specified
Jordan	Germany	GIZ	Regional authority	Circle project in 3 pilot areas of Amman, on the introduction of source separation for PPW and biowaste, and sorting/treatment facilities

Tunisia	Tunis	شبكة تونس الخضراء- Réseau Tunisie Verte	NGO	Actions against illegal imports of waste from Italy
Algeria	Alger	Agence Nationale des déchets	National agency	Several actions (covered in the good practices): SNID, implementation of selective collection
Jordan	Amman	Abu Rashed For Plastic Recycling	Recycling Facility	Recycling facility
Algeria	Mostaganem	PROFERT	Waste Management Company	Industrial production of compost
Tunisia	Tunis - Tunisie	Agence Nationale de Gestion des Déchets	National agency	None specified
Tunisia	Fouchana	ECO GAD	Collecteur de déchets	None specified
Algeria	Région Est: Annaba	Fondation PROBIOM	NGO	Awareness raising scientific expeditions on marine litter
Algeria	Wilaya de Tizi Ouzou	Villages de la Commune de Bouzguène	Local authority	Implementation of selective collection
Spain	Vic, Catalonia, Spain	Ajuntament de Vic	Local authority	Successful implementation of community composting in the city of Vic to valorise the organic waste
Morocco	Green chip Casablanca and Oujda	Projet Green chip Association Al jjsr	NGO	Training centre for reuse of WEEE
Jordan	Amman, Jordan	BE for Environmental services	Waste Management Company	Waste Management Company
Morocco	Casablanca	Fédération marocaine de plasturgie	Federation	Federation of Moroccan association of recycling and recovery of plastic waste
Morocco	Casablanca	Ressourc'In Association al ikram	NGO	Social enterprise working on professional reintegration with waste management

This list partly overlaps with the good practices reported and presented in the previous part, yet they might give interesting references. It will be further analysed to identify other potential good practices to complete the current available ones.

CONCLUSION

KEY PRIORITIES

The stakeholder consultation enabled to identify key priorities of the target countries, namely:

- **Key fractions: biowaste, packaging waste, and plastic waste** in general.
- **Key sectors: household waste and tourism and the hospitality sector**
- **Key topics: collection and source separation for recycling, awareness raising, inclusion of the informal sector; waste reduction and prevention of littering; capacity building of local authorities; economic instruments to finance waste management; regulation targeting single-use plastic.**

NEXT STEPS

The reported good practices and frontrunners seem to cover most of these key priorities, but further investigations are required to:

- **Try to get further contributions** via the online questionnaire from organisations in target countries where few contributions could be obtained (Egypt, Israel, Lebanon). Reminders will be sent to the different contact, but no further interviews can be organized due to the timeline of the study
- **Assess the identified good practices** (quality of data, effectiveness, relevance to target countries, and possibility for upscaling), to determine if the current list includes a sufficient number of relevant practices;
- **Identify complementary practices** addressing the topic, for which there might be gaps (WEEE, informal sector, economic balance) and provide assessments. These practices should be preferably located in the target countries, but complementary research in Europe might be necessary.

UPDATED TIMELINE

The stakeholder consultation required much time to organise and conduct, and entailed some delay with the activity.

Therefore, it is proposed to update the project's timeline as follows:

- **04/06/2021:** first list of best practices ready to be reviewed by the project team, with available information and assessment of the four criteria. This includes the assessment of already identified practices, and the addition of complementary good practices that will also be assessed.
- **11/06/2021:** first feedback from the project team including a first selection of 20 best practices to document, request or proposition for more information, suggestion of additional practices;
- **18/06/2021:** final selection of 20 best practices validated by the project team;
- **25/06/2021:** first factsheet prepared and submitted for the project team to review;
- **23/07/2021:** 20 factsheets drafted by the NKEs.

ANNEX 1: STAKEHOLDERS CONSULTED

Country	Organisation	Type of organisation	Provided input through...
Israel	Ministry of Environmental Protection	National authority	Online survey
Algeria	GIZ	International cooperation	Online survey
Jordan	Ministry of environment	National authority	Online survey
Israel	Amnir recycling	Waste company	Online survey
Jordan	Ministry of Environment	National authority	Online survey
Jordan	Zarka Municipality	National authority	Online survey
Jordan	GAM	Governmental institution	Online survey
Tunisia	Association ATCOGEN (Réseau MEGARA des Villes Durables)	Local authority	Online survey and interview
Algeria	Enabel	International cooperation	Online survey and interview
Tunisia	Expert	Expert	Online survey
Tunisia	Association Action Tunisie Propre "ACT'UP"	Local NGO	Online survey
Morocco	GIZ	International cooperation	Online survey
Morocco	Association Zero Zbel	Local NGO	Online survey
Algeria	Agence Nationale des déchets	National authority	Online survey
Morocco	COVAD	Focal point	Online survey
Spain	BETA Tech Center - University of Vic / Central University of Catalonia	Research institute	Online survey and interview

Morocco	EU Delegation	EU delegation	Interview
Lebanon	Ministry of Environment	National Authority	Interview
Jordan	EU Delegation	EU delegation	Interview
Egypt	EU Delegation	EU delegation	Interview
Lebanon	Municipality of Jbeil Byblos	Local authority	Interview
Algeria	National Agency of waste	National Authority	Interview
Algeria	EU Delegation	EU delegation	Interview
Israel	Ministry of Environmental Protection	National authority	Online survey
Morocco	Association Al jjsr	Local NGO	Online survey

