



This Project is funded
by the European Union

Water and Environment Support

in the ENI Southern Neighbourhood region



N-E-JO-2

Recommendations for stakeholders on green banking and green investment opportunities to curb plastic waste in Jordan Task 5, Deliverable 4

July 2023

Version	Document Title	Authors	Review and Clearance
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WATER AND ENVIRONMENT SUPPORT IN THE ENI SOUTHERN NEIGHBOURHOOD REGION

The "Water and Environment Support (WES) in the ENI Neighbourhood South Region" project is a regional technical support project funded by the European Neighbourhood Instrument (ENI South). WES aims to protect the natural resources in the Mediterranean context and to improve the management of scarce water resources in the region. WES mainly aims to solve the problems linked to pollution prevention and the rational use of water.

WES builds on previous similar regional projects funded by the European Union (Horizon 2020 CB/MEP, SWIM SM, SWIM-H2020 SM) and strives to create a supportive environment and increase capacity of all stakeholders in the partner countries (PCs).

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ABBREVIATIONS

<i>ABJ</i>	Association of Banks in Jordan
<i>BLF</i>	Banque Libano-Francaise
<i>CBJ</i>	Central Bank of Jordan
<i>DOS</i>	Department of Statistics
<i>EBRD</i>	European Bank for Reconstruction and Development
<i>GIZ</i>	Deutsche Gesellschaft für Internationale Zusammenarbeit
<i>JFDA</i>	Jordan Food and Drugs Association
<i>LEF</i>	Lebanon Economic Forum
<i>LEM</i>	Lebanon Economic Movement
<i>MoE or MoENV</i>	<i>Ministry of Environment</i>
<i>Mol</i>	Ministry of Industry
<i>MoM</i>	Minutes of meeting
<i>NKE</i>	Non-Key Expert
<i>P2P</i>	Peer to Peer
<i>SUPs</i>	Single-use plastics
<i>SW</i>	Solid Waste
<i>SWOT</i>	Strengths Weaknesses Opportunities Threats
<i>TOR</i>	Terms of Reference
<i>WES</i>	Water and Environment Support in the ENI Neighbourhood region
<i>WW</i>	Wastewater

1 BACKGROUND

The WES Activity No: N-E-JO-2, has been supporting the Ministry of Environment (MoE) in the implementation of the Green Economy roadmap focusing on the exploration of green investment opportunities and Green Banking in the waste sector in Jordan by focusing on the issues of Single-Use Plastics.

The objective of this technical assistance activity is to identify, encourage and, if possible, enhance the banking and other sectors' interest, involvement and capacity to promote investment opportunities that foster the shift towards a green economy and facilitate access to green investments with emphasis on the waste sector related to plastics and more specifically on Single-Use Plastics (SUPs). The specific objective is to identify and enhance the understanding of the inhibiting and enabling conditions for both the Central Bank and Commercial Banks of Jordan and the private sector to start or better invest in relevant green projects. The emphasis on solid waste and the plastics sector in particular, capitalizes on all previous initiatives on green banking concerning the entire environmental sector, recognizing that the actual knowledge and experience in involving green banking is still practically absent on funding of the solid waste sector and plastics projects in Jordan. It is extremely limited in Lebanon and other countries of the region, despite the fact that projects on renewable energies and very few on water have been financed by commercial banks with guarantees or subsidies by CBJ.

The present document includes some recommendations deduced from the WES activity N-E-JO-2 under the title "Consolidation activities on Green Banking and support to green investment opportunities to curb plastic waste in Jordan", initiated in 2021. The activity took into account the current state of plastic pollution in Jordan and included a thorough inception phase, a survey with distribution of a 14 question-questionnaire, distributed via the Central Bank of Jordan (CBJ), to all the commercial banks of the country, which was fully answered by 11 of them. Furthermore, a series of extensive face-to-face interviews was carried out, including with the Governor of the CBJ, the Secretary General of the Ministry of Environment, the Jordanian Chamber of Industry and many stakeholders from industry and other related sectors and groups.

Through the above, the actual situation of plastic pollution was reviewed and many opportunities and challenges were identified and discussed, policy directions suggested concerning funding and green banking were considered, while an important development that needs to be taken into account is the drafting of a Green Banking Strategy by the Central Bank of Jordan (CBJ) in close cooperation with the European Bank for Reconstruction and Development (EBRD) and the World Bank (WB), which is still today (February 2023) an ongoing process in which WES had an initial input and was promised to be consulted on the final draft.

Finally, the recommendations presented here take into account measures proposed or enforced in various other parts of the region, including in Abu Dhabi.

This activity on the funding of the solid waste sector and plastic projects in Jordan is coordinated closely with the WES Focal Point at the Ministry of Environment (MoENV), keeping the EU Delegation to Jordan closely involved. It is also closely linked with the 'twin' WES activity "Contribution to the development of a joint public-private roadmap to transition to reduce the use of single-use plastics (SUPs) in Jordan"

(N-E-JO-1) which aims to enhance the country's awareness and capacity to respond to the challenges posed by the increasing pollution by plastics.

Read more on the WES website at: <https://www.wes-med.eu/environment/activities/jordan/>

2 THE CONSULTATION PROCESS

To discuss with the stakeholders in Jordan the findings of the work done so far, a consultation process was organized by WES in close collaboration with the Ministry of Environment and the EUD to Jordan from March till May 2023. The objective was to share and discuss the proposed recommendations, deemed realistic and implementable, for necessary improvements of the enabling conditions and operations for the stimulation of interest for green financing/banking in the plastics sector and more specifically on SUPs. A dedicated consultation meeting, organized to also discuss the proposed "Roadmap to address SUP items in Jordan" under WES twin activity N-E-JO-1, took place on the 17th of May 2023 in Amman. A separate report is available for this consultation meeting on the WES website¹. The consultation meeting affirmed the recommendations included in this document.

3 BRIEF OVERVIEW OF THE PREVAILING SITUATION IN THE COUNTRY AS IT CONCERNS SUPs

From the various contacts and information collected throughout the study period and the WES Twin activity N-E-JO-1 in Jordan, it was concluded that the Ministry of Environment has as priority the phasing out of SUPs. However, neither the Ministry nor any other agency seems to have accurate data on the amounts of SUPs generated in the country. Consensus exists about huge amounts of SUPs waste found in dumpsites and landfills. Sizable amounts of SUPs are scattered all over the Kingdom, in streets, highways, forests and the seashore of the Dead Sea and Aqaba. This situation will ultimately lead to major and significantly negative impacts on nature, biodiversity, health and Jordan's overall environmental state, affecting negatively the landscape and tourism as well.

This situation prevails despite the fact that the MoE and the Government of Jordan as a whole, have developed policies, measures and guidelines for tackling waste in general, and SUPs in particular, through:

- developing the degradable shopping plastic bags bylaw in 2017;
- developing the Waste Management Framework law no. 16 in 2020;
- developing EPR instructions on packaging waste in 2022.

A more comprehensive review of the existing situation and of the legal provisions in place has been elaborated under the Baseline Report Task 2 -D2 by the WES Twin project (activity N-E-JO 1) under the

¹ https://www.wes-med.eu/activities_type/n-e-jo-2-consolidation-activities-on-green-banking-and-support-to-green-investment-opportunities-to-curb-plastic-waste-in-jordan/

title “Contribution to the development of a joint public-private roadmap to transition to reduce the use of single-use plastics (SUPs) in Jordan” of March 2022.

4 THE OPPORTUNITIES, CHALLENGES AND OBSTACLES IDENTIFIED ON WHICH THE RECOMMENDATIONS ARE BASED

4.1 OPPORTUNITIES IDENTIFIED, ON WHICH THE RECOMMENDATIONS ARE BASED

- The very high and rapidly growing level of recognition at international, regional, and national level of the seriousness of the plastic pollution and the urgency to be addressed drastically without delays.
- The existence of several examples of legislation and practical measures for the reduction/elimination of SUPs in the countries of the region with positive results that can be replicated.
- The already existing provision for SUP bags in Jordan which at the beginning had some positive results (but it was then “abandoned”).
- The interest and involvement of international organisations and donors that are keen to help Jordan in elaborating effective relevant strategies and measures (EBRD, WB, EU, G12, USAID, etc.) and in supporting concrete relevant projects for addressing SUPs.
- The fact that addressing plastic pollution is among the obligations of Jordan within Agenda 2030 and the achievement of the SDGs.
- The shift from SUPs to Multiple Use Plastics (MUPs) and sustainable alternatives as well as the recycling of plastics and the transformation of the “linear” relevant industry of the country into a more “circular” one, have the potential of becoming commercially and economically lucrative businesses.
- The public is, to some extent, informed and almost ready to accept new regulations and changing of practices on the use of plastics in view of the plastic pollution issue, which is widely recognized as unacceptable.
- Tourism, as well as other industrial and service sectors, have to change soon and eliminate SUPs in order to respect their own sectoral international “quality” or “green” standards. Definitely the internationally prevailing trend will soon encourage imports or manufacturing of non-plastic alternatives to get into the market including for replacement of SUPs by MUPs.

4.2 CHALLENGES AND OBSTACLES IDENTIFIED, WHICH HELP TO GUIDE THE RECOMMENDATIONS

- Lack of specific national legal provisions for plastics and SUPs, despite the ones mentioned already, and mainly not enough mechanisms in place to implement and enforce policies on SUPs and solid waste management, in general. This is part of a rather weak and “fragmented”

overall environmental governance in the country coupled with difficulties in coordination among many different Ministries, Agencies and bodies at national and decentralized levels, particularly as it concerns municipal waste. This is also the case with the functioning of many industries under poor monitoring, supervision and control of their activities.

- Existence of a rather extended, partly low-technology plastic recycling industry producing:
 - (a) black garbage plastic bags using as raw material locally collected plastic waste
 - (b) SUPs from imported raw material
- Some clean waste and PET bottles are exported. The plastics business, in all subsectors, employs altogether about 11000 workers. It is noteworthy that the locally collected raw material is provided by informal sources/scavengers, directly picking waste from the municipal bins. The whole sector is producing approximately 42% of the locally consumed plastics, generating adequate profits for many. Therefore, the sector is, in principle, unwilling to be regulated and/or modernized, unless clear provisions and support for infrastructure and for modernization/transformation is secured by the government and/or external financial sources. The sector is partly split in the sense that some claim that if demand is maintained, production and the market will be maintained. However, nearly all admit and know that the current situation cannot be tolerated by the society for the years to come. Manufacturers or importers of alternatives from paper and other material are already mobilized and the future of the sector, if the practices and businesses based on current operations continue unchanged, is not viable at all.

In conclusion, properly addressing the impact of strict regulation/elimination of SUPs in this industrial sector is a challenge.

- Despite recognized urgency and relatively high visibility of the plastic pollution problem there are still great needs for proper, evidence-based public awareness and in-depth education at all levels, including at the tertiary, technical and vocational level, on all aspects of technology and socioeconomic instruments related to plastics management and sustainable replacement/transformations of this sector, including on SUPs. The challenges here are technical, administrative but also financial because the above mentioned are parts of a medium- and long-term process for which funding from external sources (donors, etc.), is very limited.
- Capacity building of adequate scale on the management of plastics and SUPs replacement, both pre-service and in-service for all relevant target groups, is in most cases very limited or entirely missing and this requires funding.

From all the above, it is evident that there are considerable needs for additional, flexible and affordable funding, including from green banking, for the plastic waste management/recycling sector, and for drastic transformations in the SUPs manufacturing sector. Major obstacle in materialising such support is that the overall experience in green funding (except energy) in the entire MENA region on this issue is virtually absent or extremely limited.

4.3 FOCUSING ON THE OBSTACLES IN PROMOTING GREEN BANKING

Obstacles are understood as those that hinder a project from reaching the level where finance is needed (i.e., project need and inception, environmental impacts) and not those related to a particular scheme, as the latter is bank related and the former is related to bank procedures. This was confirmed by the responses received from the banks in the WES questionnaire, which states that the usual reasons for not funding a particular project is related to finance matters and not the client's business sector.

The analysis based on the bank's perspective, when considering finance of any environmental project, confirms that:

1. Economic feasibility, as seen by the banks, basically relates to the frequently inadequate elements on sources for repayment of loans
2. Lack of adequate studies and statistically proven experiences
3. Lack of a neutral or reference body to evaluate technical and financial studies of projects
4. Complexity or lengthy grant proceedings, with projects requiring too many prior approvals from government entities that are considered highly inefficient and bureaucratic. This happens during the study of a project as well as in permitting usage after completion.
5. Lack of technical expertise, where frequently inexperienced entrepreneurs propose investment in new technologies, which a bank is not technically equipped to address.
6. Furthermore, Jordanian Banks had not until now the opportunity to operate in partnership with the EBRD, or other experienced international organisations. The expected support is not focussed so much on the eventual actual contributions made by EBRD towards a fund but rather on the role of the latter in providing the necessary expertise and technical support. This could make local banks more comfortable. The EBRD also holds the institutional memory of new but adequately tried and mature technologies, whereby finance is much less risky, readily available and can be processed quicker.

5 ANALYSIS AND RECOMMENDATIONS

5.1 ANALYSIS OF THE ACTUAL FUNDING NEEDS FOR ADDRESSING SUPs

To identify the ways funding could help the reduction and progressive phasing-out of SUPs in Jordan, there is a need to analyse and understand better the factual information collected and presented in the previous chapters.

In essence, the main difficulties in eliminating SUPs, come from the local SUPs market which is currently fairly large in comparison with other sectors with many types of businesses profiting from it. It is necessary therefore, to disaggregate and understand in detail, to the extent possible, the obvious needs of the management of plastic waste in conjunction to the internal specificities of the SUPs sector.

1. All agree that particular efforts should be made for improving different aspects of plastic recycling in the country, particularly for reliable, separate collection schemes, at national and municipal level. This will require significant investment, where Banks could finance public (e.g. of Local Authorities), public-private or purely private schemes.

A considerable part of the aforementioned market is covered by companies not involved in SUPs manufacturing. They mainly include importing companies, as well as distributing and retail companies. It is not expected that their activities will be affected significantly (if at all) by strict regulations, e.g. a ban, if there is a well-designed plan in place for gradual shift to (equally imported) non-plastic alternatives or to multiple use replacements of SUPs.

2. The significant market of SUPs manufacturing is estimated to make around 89 to 90 MJD per year. The major part of this sector is related to the production of black plastic garbage bags. These bags are not included in the bans of the current legislation and, in principle, they will continue to be produced in the foreseeable future, while the same plastic pellets produced locally from the recycling of plastic waste for the production of the garbage bags, depending on their quality/purity, could be used for the production of other types of manufacturing, for instance for some MUPs. The funding needs for these mostly commercial changes are not considered very significant for major investment requiring major intervention of banks. There are, however, some visible needs and opportunities also in this sector.
3. In fact, the businesses that will undertake major changes and therefore are likely to be directly affected by any new strict controls/ban, will be those producing Single Use Plastic shopping bags (which are already forbidden through the regulation no 45 of 2017), manufactured in Jordan, using as raw material imported polyethylene pellets.

Therefore, the major needs and opportunities for funding focus on the necessary transformations in:

(a) management infrastructures for improving different aspects of plastic recycling within the plastic sector,

(b) promotion of new MUP products in replacement of SUPs

(c) shifting to the production of SUPs or MUPs alternatives from other non-plastic raw material, e.g. of vegetal origin. (this option however requires caution so as to be truly sustainable)

- As already shown, plastic recycling in Jordan is, relatively to other MENA countries, well established for most plastics (except PET). It is reported to process 4000 to 6000 tons per month of plastic waste, most of which is locally used, with the main challenge being its contamination before or during collection. To improve plastic waste recycling, appropriate programmes should be developed and financed to: (1) reach out to the consumers in order to clean discarded plastics before disposal, followed by, (2) sustainable separate collection schemes to avoid contamination.
- PET recycling is currently unavailable in Jordan, although PET is highly recyclable. It can be easily collected, and PET bottles are likely to continue being in use for many years to come. Possibly a PET recycling facility can be created and for this costly project, financial support from green banking with government or donors' involvement will be needed in order to improve the rate of PET

recycling which is a major SUP material (while, alternatively, PET could be converted to polyester fabric strings in large textile industries).

- The industrial sector and most retailers in Jordan are motivated by the market demand of products. As long as there is adequate market demand, the products will be made. Most of the interviewed stakeholders, not being aware of the results of the analysis included in this document, were hesitant of banning SUP products or adding non-refundable taxes that increases the price of items as a first step. Most opinions were in favour of product labelling to encourage recycling and proper disposal, raising awareness of the dangers of SUPs. They favored restrictions to be limited to natural and cultural heritage sites and utilizing the EPR system in association with the other private sector industries. It is therefore strategically wise and important to invest substantially in changing the demand in the market from SUPs to other alternatives, e.g. paper products that are recyclable or reusable products, before or in parallel with investing to change the manufacturing process itself. Basically, to invest on citizen consumption patterns first, promoting SUPs alternatives such as paper and cardboard products and reusable products. This investment could be a combined effort of the government and the emerging alternatives to SUPs sectors.

5.2 RECOMMENDATIONS FOR THE NEEDED INSTITUTIONAL REFORMS FOR ENHANCING THE ENABLING CONDITIONS FOR GREEN BANKING AND GREEN INVESTMENT TO CURB PLASTIC WASTE AND ADDRESS SUPs

Recommendations in this Chapter revolve around three components, namely:

- (1) institutional issues (identified below in relation to key stakeholders),
- (2) emphasis on the need for suitable communication and education to stimulate the necessary behavioral changes, and
- (3) suggestions on capacity building needs to enhance ownership and management of such serious matters in the fight against plastics in general but confined first to the need for drastic reduction and phasing out of SUPs.

5.2.1 INSTITUTIONAL MEASURES AND REFORMS

These should not be considered in isolation from the two strategic documents: the “Green Growth National Plan” and the under elaboration “Green Strategy” of the Central Bank of Jordan (CBJ).

Core Stakeholders who need to be involved and motivated to participate in the efforts to address the plastic pollution and SUPs problem are the following:

- Ministry of Environment
- Ministry of Local Administration
- Ministry of Investment
- Ministry of Industry and Trade and Supply
- Central Bank of Jordan (CBJ)

- Association of Banks of Jordan (ABJ)
- Chamber of Industry (CI)

The institutional provisions need to reflect the overall national policies on the issues related to solid waste management and green funding for addressing the problem of SUPs that concern directly the Ministries of Environment, of Local Administration, of Investment and of Industry but also the Central Bank of Jordan and others. These provisions should include:

- (i) Ways to enable the implementation of the waste hierarchy scheme to reduce, reuse and recycle the significant amounts of plastic waste produced in Jordan, especially SUPs, in order to reduce the negative impacts of plastic waste
- (ii) Circular economy has to be promoted at different levels and through various ways
- (iii) The Polluter Pays and the Extended Producer Responsibility (EPR) principles have to be applied.
- (iv) Addressing the phasing-out of single use plastics with all policies and strategies that are related has to be linked to the Framework Law of Waste and the Green Growth Strategy as well as to the Sustainable Development Goals (SDGs).

Ministry of the Environment

The role of MoE should be better clarified and strengthened, problems with implementation minimized and capacity raised in the involved services to respond effectively to the level of the responsibilities entrusted to them. Currently the Ministry is understaffed, with services lacking adequate competences to deal with the plastic and SUPs issues. The Government should review the relevant institutional framework and consider allocating specific responsibilities between policy and regulatory settings embedded within the MoE while monitoring and enforcement/controls could be entrusted to an entity in the form of a Commission or Agency.

The need for such separation of roles and allocation of the control and enforcement tasks to an Agency or empowered of inspection body is evidenced by the presence of an undefined but significant number of illegal industries and activities taking place at the moment. This will cover the distance between, on the one hand allowing the Ministry to keep its competence in licensing and permitting any industrial activity, and on the other in enhancing monitoring and enforcement that currently are lagging behind. Such an Agency may be particularly useful to deal also with the announced “green taxes” on harmful environmental activities to be imposed, SUPs user restrictions, etc.

Ministry of Local Administration

This Ministry is very important in dealing with local Authorities on wastes and SUPs, where the competences need to be strengthened at local level. Its participation in the formulation and facilitation of enforcement of policies and actions of the Ministry of Environment and any specialized Agency will be essential.

Ministry of Investment

Business development, funding and financing of schemes that fall within the Green Growth Strategy are under the mandate of this, newly created, Ministry. Having a National Strategy and Action Plan for

green sustainability, with green finance being an integral part of it, should be, obviously, one of its key objectives. This, in turn, could lead to encouragement of green investment, e.g. by mobilizing private capital through thematic bond issuance and appropriate loans that would enable investment in the recycling of plastics and replacement of SUPs by MUPs and non-plastic alternatives.

An attractive framework may encourage transition of plastics production from linear to a more circular one, learning also from good practices across other industrial transformations, notably supporting renewables in the energy sector. Investment proposals for production of alternatives to SUPs may be examined as priority. For instance, investors who are interested in the introduction in the market of paper bags (production and use) may be encouraged.

Financing is also crucial for scaling up the support for innovation and solutions such as the development/adoption of smarter and more recyclable plastic materials, making recycling processes more efficient, as well as tracing and removing hazardous substances and contaminants from recycled plastics. Since, SUPs prevail in the food sector, restrictions of SUPs in takeaway packaging, where many alternatives are already available, could be a possible low hanging fruit, if supported with small incentives, e.g. reduced taxation on (sustainable) alternatives.

Ministry of Industry

The Ministry of Trade & Industry is the lead policy advisor to government on trade, industrial and private sector development with responsibility for the formulation and implementation of policies for the promotion, growth and development of domestic and international trade and industry. Their voice will have to be heard at one time or another.

According to its law number 18 for the year 1998, the Ministry takes on the responsibilities of regulating the industry by type, classifying it, registering it according to an internal regulation, and preparing the programs and studies that work on developing the industry and increasing its competitiveness. It also supports the industrial sector in creativity and innovation as well as passing laws that are attractive for the business environment. This role may prove needed when the Green Strategy is developed. The ministry also manages civilian consumer enterprises in Jordan. It fosters the development and strengthening of the Jordanian economy in partnership with the private sector, to raise the citizen's standard of living in Jordan. This is supportive to reaching out to consumers when it comes to awareness raising.

In December 2022, the Secretary-General of the Ministry of Industry, Trade, and Supply Dana Zu'bi said that the country needed to switch to a green economy immediately to halt the depletion of natural resources, reduce environmental pollution, and set the stage for sustainable development. Such a statement assures the presence of a partner to our efforts.

The Central Bank of Jordan (CBJ)

a) **The Green Strategy.** During Task 3 WES was informed by both EBRD and CBJ that a Green Strategy is in progress and its draft will be delivered by the end of the year 2022. In pursuing this matter with the CBJ during Task 4, we were informed that the Strategy is being developed by the CBJ in coordination with the World bank (rather than the EBRD). Apparently, the Strategy is expected to be ready by the end of Quarter One of 2023 and not before. There is an understanding that WES and

other stakeholders will be invited to express their opinions on strategic items included. As such, it was internally agreed in WES that, while awaiting the Strategy, efforts should be made to keep moving forward, essentially by defining the prerequisites that should be in place for such a strategy to be successful. These should include specific institutional setups for implementation, as well as communication and awareness raising provisions to make the Strategy known, understood, user friendly and functional. Although the Strategy is likely to address finance in general and the Banking Sector in particular, its impact should resonate with expectations of as many as possible stakeholders in the country.

b) Capitalizing on simulation of existing experience. There is already a CBJ directive in Jordan towards green finance for energy related projects to resort to green loans, if desired.

c) Elaborating a financial vehicle for plastics/SUPs. An appropriate CBJ finance vehicle is needed including *inter alia*:

c.1 facilitation of soft loans

c.2 foregoing some of the CBJ restrictions, and

c.3 holding joint workshops with commercial banks and financing programs

d) A centralized database. Such a base should be in place (eventually in synergy with the Ministry of Investment) for Green Finance Schemes, where a national network is built and experiences are shared. The database and network can be subdivided by sectors such as solid waste in general, recycling, SUPs and other emerging interesting issues and opportunities.

e) The Jordan Loan Guarantee Company (JLG Co) could be useful for facilitation of loans from commercial banks when guarantees provided by the borrower are not sufficient for the commercial bank where the request for funding is made. JLG encourages commercial banks to finance projects that are bankable (with guaranteed cost recovery) yet lack collateral as the JLG guarantee of the loan is the collateral.

f) A closer cooperation with the Association of Banks of Jordan (ABJ) and synergies of CBJ with commercial banks in issues of green banking is needed. In this area, the role of ABJ could be extremely useful, particularly if this role is properly enhanced and somehow “formalized”. Since this body can represent, as a single entity, a viable channel of communication and cooperation with the entire banking sector in the country, it can play a pivotal role in sending and receiving messages and information to and from banks, and lead on efforts that require collective action from the banks.

The Chamber of Industry (CI)

The plastics sector and the **Chamber of Industry** should also undertake a more proactive position as it concerns replacement of SUPs by elaborating/commissioning a study and strategy for appropriate techno-economic measures for shifting to more circular and sustainable options, benefiting from existing incentives and funding mechanisms as well as by proposing new appropriate ones, based on sound, evidence based, implementable and justifiable arguments for a balanced approach of the different industrial and commercial sectors related to SUPs and also their alternatives.

5.2.2 FUNDING AWARENESS RAISING AND CAPACITY BUILDING IN ADDRESSING THE PHASING-OUT OF SUPs

There are many different types of communication, awareness raising, formal, non-formal and informal education and capacity building, either for the general public or for targeted audiences, including various forms of pre-and in-service trainings that could be used to speed up the phasing-out of SUPs and promote more sustainable consumption and production away from the relevant categories of plastics that constitute main waste streams.

Systematic and effective awareness raising campaigns using public media, radio, TV, press, or social media as well as interactive local meetings to be organized by local Authorities, NGOs/CSOs require adequate funding to last for at least 2-3 years.

Such funding should be secured by the Government and supported by philanthropies, external aid and eventually the business sector working for addressing the plastic pollution problems.

Particular education courses are also needed to be included in relevant specific schools and university departments of chemistry, chemical engineering, material sciences, etc. dealing with polymers as well as new sustainable materials to replace major plastic uses.

A different type of short-term technical education and vocational trainings for people working in various aspects of the plastic production/recycling business will be extremely useful and could stimulate a better shift to alternative options and adoption of innovative transformations in the sector with undoubtedly positive (environmental and economic) results, as experience has shown from similar approaches in a series of sectors, including of plastics.

All of the above require well trained educators/trainers some of whom already work in formal education in schools or universities, while others are non-formal educators cooperating in various projects. Well informed communication experts and facilitators of interactive trainings and capacity building programmes are also available in the region and some in Jordan. Many of them are already active in environmental NGOs of Civil Society Organisations and others are employed by local Authorities, Consultancies, etc. A lot of expertise is now, also for internal purposes (retraining of staff, etc.), employed by the private sector, mainly in Europe, but increasingly also in the Middle East.

Banks (as in other parts of the world) may finance communication and capacity building/ trainings undertaken by the private sector as integral parts of their development, e.g. entering in new markets or expanding to new sectors introducing new products in the market (advertisement) and in enhancing the capacity and skills of their workers and/or retraining their personnel.

Finally, many of the above trainings in our “digital era” could be carried out on-line, facilitated through dedicated e-learning courses, synchronous or asynchronous, guided or not, all of which require funding from public and/or private sources, while the synergy of Government and donors could create the necessary culture for funding the maintenance or even restoration of public and national goods, such as a clean environment, with plastic free soils and waters.