



Municipal Development and Lending Fund (MDLF)

**West Bank and Gaza Resilient Local Government
and Municipal Services Project (RLGMSP)**

**Nationally called Municipal Development Program-
Phase 4 (MDP4)**

**Environmental and Social Management Plan (ESMP)
For Supply and Install Solar System for Electricity
Production Sub-projects for Az-Zababdeh Municipality**





This ESMP is part 4 of bidding document, contractors obliged to respect and implement mitigation measures mentioned or unforeseen under municipality supervision and MDLF monitoring.

Attention: where EHSE applicable to bidding document and where Environmental Warranty is required, then financial provision under section 6 is not applicable and EHSE regulations governs.

Municipality	Az Zababdeh Municipality
Sub-Project Title	Supply and Install Solar System for Electricity Production
Location	Jenin Governorate – Az Zababdeh
General Description	The project consists of supplying and installing electrical solar energy production panels, a second phase of the previous solar power plant project. This production aims to secure enough electricity for street lighting. The size of the plant is 80 kW and it will provide 120,000 kW per year. The Municipality has the needed approval from the Electricity Company.
Sub-Project Activities	The project contains the following main activities: <ol style="list-style-type: none">1. Leveling and site preparation2. Preparation of specifications and processing of tender documents3. Supply of solar panels and necessary materials4. Installation of solar panels by contractor5. Project installation6. Tests for operation purpose





List of Abbreviations

EA	Environmental Assessment
EIA	Environmental Impact Assessment
EQA	Environment Quality Authority
ESHS	Environment Social Health and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMF	Environmental and Social Management Framework
ES	Environmental Screening
ESF	Environmental & Social Framework
IEE	Initial Environmental Examination
LALP	Land acquisition and Livelihood Plan
LALF	Land acquisition and Livelihood Framework
LGU	Local Government Unit
LTC	Local Technical Consultant
MDLF	Municipal Development and Lending Fund
MDP	Municipal Development Program
MoH	Ministry of Health
MoLG	Ministry of Local Government
MoTA	Ministry of Tourism and Antiquities
PCBS	Palestinian Central Bureau of Statistics
PCRs	Physical Cultural Resources
PEAP	Palestinian Environmental Assessment Policy





PEL	Palestinian Environmental Law
PNA	Palestinian National Authority
PRDP	Palestinian Reform and Development Plan
RoW	Right of Way
SDIP	Strategic Development and Implementation Plan
WB	World Bank





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1. GENERAL

The Municipal Development and Lending Fund (MDLF), as the national development agency in the local government sector, has been mandated to implement the national Municipal Development Program (MDP) to support local development in the country with specific focus on improving capacities of municipalities to provide better services to the Palestinian citizens. The MDP is a multi-phase national program that has been financed by the Palestinian government and several international financing partners. The program will support 159 municipalities in West Bank and Gaza (WB&G), which includes 25 municipalities in Gaza and 134 municipalities in the West Bank upon meeting the eligibility criteria.

The Municipal Development Program Phase Four Objective is to strengthen municipal capacity to deliver accountable, sustainable, inclusive, and resilient services to the municipal population in the WB&G. The program will be implemented in two consecutive cycles, and is structured in four components:

Component 1: Performance Based Service Delivery Grant Transfer: Through this component the program will provide participating municipalities with the Performance-Based Grant (PBG) financing that will be used to finance infrastructure sub-projects in the following sectors: road rehabilitation, public facilities, water and wastewater services, electricity and energy projects, and solid wastes management, taking into consideration a negative list which considers high social and environmental risk projects, in accordance with project Environmental and Social Management Framework (ESMF) requirements. The specific infrastructure sub-projects will be selected from the municipality Strategic Development and Implementation Plans (SDIPs).

Component 2: Sector Policy and Institutional Development: This component, implemented by MDLF, is designed to reinforce, and complement MDP other components with targeted technical assistance (TA), policy guidance, and capacity development for municipalities and other various public agencies at the national level.

Component 3: Competitive Grants for Natural hazard and Climate Change Resilience: this component will support municipalities to reduce natural hazard related risks in support of the efforts of the Palestinian Authority (PA) to alleviate climate change impacts and reduce all forms of environmental pollution.

Component 4: Project Implementation Support and Management: This component will finance goods and consultant services for monitoring and evaluation, outreach and communication and local technical consultants for the engineering supervision of Component 1 and the MDLF management fee.

MDP4 component 1 and component 3 will finance investments or activities that are within the legal mandate of municipalities as per the Local Authorities Law of 1997 or revision thereof.





Sub-projects under MDP4 aims to enhance the municipal services when environmental and social impacts are properly mitigated during design, construction, and operational stages. Considering that sub-projects fall within but not limited to the following sectors:

1. Water and wastewater services:
2. Solid Waste Management
3. Road Rehabilitation and Maintenance Services
4. Public Facilities
5. Electricity and energy project
6. Other services such as eligible recurrent expenditures

For Electricity and Energy Projects; the project finance: Electricity and energy projects, including goods and works for rehabilitation of distribution networks, street lighting, energy efficiency and renewable energy related projects for the benefit of municipalities. Large scale sub-projects like waste to energy, with high risk will be excluded such as large power plants, etc.

2. POLICY & LEGAL FRAMEWORK

This sub-project is considered one of the projects that are to be implemented in full compliance with the national and local legislation, including laws, regulations, and standards governing environmental management, social protection, and preservation of cultural heritage applied by the Palestinian National Authority, and in full compliance with the Palestinian Environmental Law (PEL) No. (7), year 1999. In addition to the revised Palestinian Basic Law of 2003, the Jordanian Law No. 79 of 1966 The Cities, the Villages and Buildings Regulating Law, the Jordanian Heritage law No. 51 for the year 1966, that manage case of accidental findings of any antiquities or PCRs and the Buildings and Regulation Bylaw for Local Authorities No. 5 for 20.

Additionally, the sub-project is complying to the World Bank Environmental and Social Management Framework and relevant standards (ESSs):

- Environmental and Social Framework (ESF)
- WBG Environmental, Health, and Safety (EHS) Guidelines and Technical Note

The sub-project will comply with all applicable Palestinian laws, policies and regulations that correlate the sub-project planning, implementation, and operations to environmental and social standards, as well as the applicable World Bank Environmental and Social Framework, WBG Environmental Health





and Safety Guidelines (EHSGs) and Good International Industry Practices (GIIP), and the relevant ratified international labor laws and treaties.

The following depicts definition of Cultural Heritage and Physical Cultural Resources, Involuntary Resettlement, Voluntary Land Donations and Willing Selling Willing Buying:

Cultural Heritage and Physical Cultural Resources

The definition of PCRs includes any movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance. PCRs may be located in urban or rural settings, and may be above or below ground, or under water. Their cultural significance may be at the local, provincial, or national level, or within the international community. MDLF will not finance any sub-project that might not be complied with ESS6.

In case of accidental findings of any antiquities or PCRs that might occur during the implementation of the sub-project, the contractor must notify MDLF and the municipality immediately. According to the applicable Jordanian Heritage law No. 51 for the year 1966, Article 15, MDLF must stop the contractor and notify the related Authority (Ministry of Tourism and Antiquities, or MoTA) within 3 days to take the necessary actions.

In other words, the contractor is responsible for familiarizing themselves with the following “Chance Finds Procedures” in case culturally valuable materials are uncovered during excavation:

- Stop work immediately following the discovery of any materials with possible archeological, historical, paleontological, or other cultural value; announce findings to project manager; and notify relevant authorities;
- Protect artifacts as well as possible using plastic covers; implement measures to stabilize the area, if necessary, to properly protect artifacts;
- Prevent and penalize any unauthorized access to the artifacts; and
- Restart construction works only upon the authorization of the relevant authorities.
- Control access to site where finding occurred

Involuntary Resettlement

In principle any sub-project that is outside the master plan that is considered public domain, is not eligible for financing. However, given that all municipalities are involved with different capacity and given the number and types of projects the ESS5 is triggered. Any sub-project that could trigger the Land Acquisition, Restrictions on Land Use and Involuntary Resettlement (ESS5) will follow procedures depicted in the LALF. At the same time, the respective negative list stated in Operation Manual (OM) defines the criteria for the exclusion of the sub-project impact land or livelihoods.





Considering that Municipality when submitting a project proposal/appraisal to MDLF would have accomplished all legal requirements acquired by and respecting the revised Palestinian Basic Law of 2003, the Jordanian Law No. 79 of 1966 The Cities, the Villages and Buildings and Buildings Regulating Law, and the Buildings and Regulation Bylaw for Local Authorities No. 5 for 20.

1.1.1.1 Voluntary Land Donation (VLD)³

In cases where there is voluntary land donation, defined as when people or communities agree to voluntarily provide land in exchange for benefits or services related to the sub-project, the below requirements must be met:

1. The act of donation is undertaken without coercion, manipulation, or any form of pressure on the part of public or traditional authorities;
2. The potential donor is aware that refusal or to say no is an option without any consequences, and that right of refusal is specified in the donation document the donor will sign.
3. Land to be donated must be identified by the municipality in coordination with the community for the project that have been selected; the impacts of proposed activities on donated land must be fully explained to the donor;
4. The donor may negotiate compensation (in full or in part) or alternative forms of benefits as a condition for donation
5. Donation of land cannot occur if it requires any household relocation;
6. For community or collective land, donation can only occur with the consent of the individuals' owners of the land.
7. Verification must be obtained from each person donating land (either through proper documentation or through confirmation by at least two witnesses);
8. The implementing agency establishes that the land to be donated is free of encumbrances or encroachment and registers the donated land in an official land registry;
9. Voluntary land donation will not be permitted in cases of site-specific infrastructure as community pressure could be too onerous for a person to refuse, thus removing the power of choice.⁴
10. In case that the donated land was not used for it is agreed purpose then the municipality needs to have a written agreement from the land donor that they agree to use the land for the new purpose, otherwise the municipality will return the land to the owner.
11. There should be no coercion, manipulation, or pressure from the community or public or traditional authorities for individuals to voluntarily donate land.
12. The proportion of land that may be donated cannot exceed the area required to maintain the donor's livelihood or that of his/her household. The documentation for VLD provided below should be sufficient to verify this.
13. The infrastructure must not be site-specific.
14. The person who donates the land should have access to project level grievance mechanism.

³ VLD procedures are accepted by Ministry of Local Government

⁴in cases of site-specific infrastructure it is recommended to use land under government ownership or municipalities in exceptional cases willing-buyer willing-seller if adequate measures are put in place





15. The donor should be provided with the information for such grievance mechanism.

Willing-Seller, Willing-Buyer

For land purchase through a willing-seller willing-buyer approach, land acquisition must occur by mutual agreement in exchange for a notarized purchase contract based on the market price at the date of acquisition. In addition, these questions should be answered and documented:

- If the owner of the land refuses to sell, will the municipality search for another plot of land? Yes/No
- Is the owner free of municipality or social pressure to refuse to sell? Yes/No
- Is the owner made aware of his/her refusal to sell? Yes/No
- Will the owner continue to live in current place of residence (will not relocate)? Yes/No
- Is the land free of any renters, users, squatters, or encroachers? Yes/No
- Is the land free of any competing claims of ownership? Yes/No
- Can the owner negotiate for the price? Yes/No
- Is the owner made aware that he/she can negotiate for price? Yes/No
- Does the owner have access to a project level grievance mechanism? Yes/No
- Is the owner made aware of such grievance mechanism? Yes/No
- Is there documentation reflecting the understandings above, signed by the owner? Yes/No

Finally, prior to land purchase process, the municipality council shall take an official decision in the municipality intention to purchase certain land, then municipality should obtain MoLG district office approval after checking: (1) allocation in the budget abundance, (2) The MoLG to create committee to evaluate the land market value, the committee shall represent MoLG, Ministry of Finance (MOF), LGU, and the Land Authority. (3) After that, the municipality will take a decision, through the council official meeting, regarding the estimate and proceed with the purchase.

3. SUB-PROJECT DESCRIPTION AND JUSTIFICATION

The project consists of supplying and installing an electrical solar energy production panel of capacity 80 kW which is a second phase of the previous solar power plant project that has a capacity of 100 kW. This production aims to secure enough electricity for street lighting. The size of the plant is 80 Kwatt and it will provide 120,000 KW per year. The Municipality has the needed approval from the Electricity Company.

The generated waste consists of the levelling material. The expected construction phase of the sub-project is 180 days.





4. DESCRIPTION OF THE PROJECT AREA

Az Zababdeh town is located in the northern part of the West Bank, with about 4,200 residents. Az Zababdeh has a high-quality educational facilities that were developed that drew in young students from Jenin, 15 kilometers away. Az Zababdeh is surrounded by agricultural land filled with olive trees. No main agricultural activities exist in town. The establishment of the Arab American University affected the socio-economic conditions in the town calling for additional sources of water and electricity in addition to urban expansion namely towards and within the location of the university.

The project site is a piece of land next to the Municipality Park and Hall and is on the same land where the first energy production project was constructed. The land is owned by Az Zababdeh Municipality. The area of the land to be used by this project is 1000 square meters. This land is accessible from one of the main roads in town where the electrical connection point to the existing electrical network is located. It should be mentioned that no residential houses exist in the vicinity of the project area.

5. CONSULTATION AND INFORMATION DISSEMINATION

The first consultative meeting took place on the 20th of February 2024 at Az Zababdeh Municipality hall. The primary objective was to brief the stakeholders on the project and ask their feedback and to inform the stakeholders about the potential E&S impacts of the sub-project and the proper mitigation measures will be implemented to reduce/minimize the impact on the environment and the community. In addition to informing the stakeholders, two issues were discussed. Those are the expansion of the electrical network and the electricity consumption of the municipality, and the other subject was the lack of proper funding sources for increasing the electricity supply. The feedback regarding the project was positive. No real issues were mentioned by the stakeholders. All stakeholders agreed that this project forms a priority to the community.

6. ENVIRONMENTAL AND SOCIAL SCREENING OF THE ELECTRICITY/ENERGY SUB-PROJECTS

The ESMF, LALF, LMP and SEP defined the environmental and Social Screening and Assessment for MDP4 sub-projects.

The environmental and social risk of MDP-4 is rated as substantial as some of the project activities under component 3 could impact the physical environment. The possible risk of the other components 1 and 2 is classified low to moderate, moderate, and low, respectively. The identified risks and impacts are manageable and could be easily mitigated through conducting proper mitigation measures and monitoring plans.

Most of the sub projects under component 1 were of small-scale and of rehabilitative nature, The projects' impact relates to enhance the sustainability of municipal services. These subprojects have





minor environmental and social impact during construction stages with low to moderate risk potential and are mostly mitigated utilizing basic environmental measures and health and safety procedures. The screening will exclude sub projects that falls under category "A" of the Palestinian environmental policy and the under category "High" of WB ESF. Any sub-project that might trigger ESS7 will follow the chance find procedure (PCR).

MDP 4 sub-projects are also expected to fall under the same category at which rigorous environmental and social screening was done for this sub-project and a LALP or simplified LALP has been prepared and implemented in case the sub-project triggered the ESS5 (Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement).

The E&S risk of the sub-project Supply and install of Solar System for Energy Production rated as **Moderate** is of small scale and of rehabilitative nature. The sub-project has minor environmental and social impacts during construction stage and more mostly mitigated through implementing proper mitigation measures.

Environmental and Social Assessment

Energy and electricity projects aim to improve electricity services, which will improve living conditions and safety for people. Providing road lighting will improve traffic conditions in crowded areas and will have a positive impact on ease of access and reducing the risk of traffic accidents. Providing solar energy projects and other renewable energy methods will reduce municipal operating expenses, but fundamentally, these projects will reduce the environmental impact and risks associated with traditional energy sources and will certainly add to international efforts aimed at reducing global warming emissions. In addition, providing rehabilitation of electricity networks will enhance network infrastructure, service and safety and reduce the risk of accidents.

Although there will be temporary negative impacts during the implementation period of the project phases on citizens and the surrounding environment because of construction work, the environmental and social management plan (ESMP) is prepared to mitigate and manage any of the potential negative impacts on citizens or the surrounding environment during the duration of implementation or operation of the subproject. Furthermore, Annex 3 on health and safety issues in the installation and operation of solar energy systems and projects is added as a condition in the bidding documents.





Although the project has marginal environmental/social impacts, the installation of these systems is accompanied by potential risks during transportation, installation, or testing of the systems in the event of non-compliance with health and safety regulations for workers and visitors.

The construction phase of electricity network and road lighting infrastructure projects will cause negative impacts, most of which will result from power cuts during the network installation and testing work, which will cause inconvenience in the vicinity of the work site and lead to the possibility of accidents. Construction work will cause dust and dirt, inconvenience, the risk of possible traffic accidents, temporary interruption of public services related to underground infrastructure, the possibility of accidents occurring at the work site as a result of failure to place warning signs and signs, possible closure of roads as a result of construction work, and traffic disruption. to vehicles, pedestrians, and/or any other potential unforeseen environmental/social impacts that may arise as a result of improper management of construction works. In addition, installing solar energy systems on rooftops may result in accidents during transportation, installation, or testing and operation in the event of non-compliance with health and safety regulations, and potential inconvenience during the transportation, introduction, and installation of project materials in the building.

7. ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

The objective of the ESMP is to cater to the environmental and social needs of the MDP in a simple, responsive and cost-effective manner that will not necessarily overload or impede the project cycle.

The ESMP outlines the measures needed to address the issues identified in the ESMF. Moreover, the ESMP demonstrates proposed monitoring activities that encompass all major impacts and identify how they will be integrated into project supervision.

Improving electricity services will improve the living and safety conditions of people. Providing road lighting will improve traffic conditions in areas with high congestion and will have positive effects on facilitating access and reducing the risk of accidents, in addition to a positive impact on facilitating access for women and children. Providing solar energy or other methods of renewable energy will reduce municipal operating expenses, but fundamentally, these projects will reduce the environmental impact and risks associated with traditional energy sources, and will certainly add to international efforts aimed at reducing global warming emissions.

The potential environmental and social impacts can be summarized as follows:

- Risk of accidents
- Nuisance and noise
- Gas and dust emissions
- Construction waste
- Land use
- Impact on natural resources, natural diversity areas and forests
- Impact on material cultural resources such as archaeological sites





- Impact on aesthetic aspects
- Loss of green spaces

Environmental and social evaluation and auditing of electricity, energy saving and renewable energy projects.

The table indicates that electricity projects and energy saving projects received the same marks for negative and positive impacts. However, this does not mean that the overall evaluation of the project is equal. Measures must be taken to reduce negative effects. In addition, there are elements that weigh the effects in terms of their importance, and this must be taken into account. On the other hand, energy projects have more positive impacts, with one impact on health and safety that must be completely eliminated during the period of delivery, installation and operation. Health and safety measures to be taken into account are listed in Annex 3.

Table 1: Main Environmental Impacts and social impacts of electricity and energy saving projects

No.	Environmental and Social Component	Impact		
		Positive	No Impact	Negative
1.	Air Quality and Gas emissions		X	
2.	Groundwater Quality		X	
3.	Community Water Supply		X	
4.	Public Health and Services	X		
5.	Workers Health and Safety			X
6.	Noise Reduction			X
7.	Cultural and Heritage	X		
8.	Socio-economic (Employment and Poverty Alleviation)	X		
9.	Accidental risks			X
10.	Water Courses and Wadis		X	





No.	Environmental and Social Component	Impact		
		Positive	No Impact	Negative
11.	Forests and Biodiversity Areas		X	
12.	Aesthetic	X		
13.	Waste Reduction			X
14.	Land Use	X		

Table2 Key overall environmental and social impacts of renewable energy projects

No.	Environmental and Social Component	Impact		
		Positive	No Impact	Negative
1.	Air Quality and Gas emissions		X	
2.	Groundwater Quality		X	
3.	Community Water Supply		X	
4.	Public Health and Services	X		
5.	Workers Health and Safety			X
6.	Noise Reduction		X	
7.	Cultural and Heritage	X		
8.	Socio-economic (Employment and Poverty Alleviation)	X		
9.	Accidental risks			X
10.	Water Courses and Wadis		X	





No.	Environmental and Social Component	Impact		
		Positive	No Impact	Negative
11.	Forests and Biodiversity Areas		X	
12.	Aesthetic	X		
13.	Gas emissions	X		
14.	Land Use	X		

7.1 ACTIVITIES ASSOCIATED WITH CONSTRUCTION AND OPERATION

Both construction and operation phases involve activities that can be associated with impacts on the surrounding environment and society, which need to be closely monitored by the project team and the assigned Technical Consultant.

The tangible environmental and social impacts of activities on natural resources, air quality, cultural and civilizational resources, in addition to the impacts on the socio-economic aspect during the construction and operation period of electricity rehabilitation and road lighting projects, are listed in the following tables. During construction work: excavation, land leveling, infrastructure construction, and installation of pipes and equipment are the main tasks of any sub-project that will have negative impacts. Although electricity network rehabilitation projects enhance socio-economic conditions after implementation, operation requires effective network management.

Table 3 Construction Activities and Potential Impacts

Project Activities	Construction	Significant Environmental and Social Issues					
		Agricultural Resources	Water Resources	Air Quality	Cultural and Historical Resources	Socio-economic Conditions	
Demolition				X	X	X	
Removal of Existing Infrastructure					X	X	
Heavy Machinery Operation				X	X	X	





Project Activities	Significant Environmental and Social Issues					
	Agricultural Resources	Water Resources	Air Quality	Cultural and Historical Resources	Socio-economic Conditions	
Construction of Infrastructure	X	X	X	X	X	X
Excavations and Earthwork	X	X	X	X	X	X
Waste Disposal (solid, liquid, hazardous, etc.)	X	X	X			X
Wastewater Disposal	X	X	X			X
Transportation			X	X		X
Accidents and Unplanned Events	X	X	X	X		X

Table 4: Operational Activities and Potential Impacts

Project Construction Activities	Significant Environmental and Social Issues					
	Agricultural Resources	Water Resources	Air Quality	Cultural and Historical Resources	Socio-economic Conditions	
Transportation			X			X
Production and Investments	X					X
Accident and Unplanned Events	X	X	X	X		X
Overall Project Development	X	X	X	X		X

Therefore, **Annex 1- Environmental and Social Monitoring Matrix** has been prepared for the sub-projects related to the rehabilitation of electricity networks, the rehabilitation of road lighting, and solar energy, which shows the procedures that must be implemented and managed within the plan, and the contractor is considered responsible for implementing the environmental and social management plan. The responsibility is summarized as follows:

- The Contractor shall be responsible for the safety of all activities and personnel on the site.
- The Contractor shall comply with the ESMP appended to Contract Documents





- The contractor shall follow up on its implementation in addition to the preservation of the archeological assets during implementation and the coordination with archeological department when required.
- In case of the contractor non-compliance, the Environmental Liabilities to Contractor and bidding documents conditions govern.
- In case a LALP or simplified LALP has been prepared and implemented; the contractor shall be aware of the social responsibility.

Where ESHS applies, the contractor shall abide to the requirements stated in the ESHS section and utilize this ESMP to prepare the required contractor ESMP

E&S Risks Associated with Sub-projects

The expected environmental and social risks resulting from the implementation of sub-projects within the municipal development program investments (electricity network rehabilitation projects) is considered low, and their impact is for a limited period and of low or moderate intensity, and these impacts must be dealt with by good implementation of the environmental and social measures in the plan. The potential for power grid rehabilitation projects to cause involuntary resettlement is reduced by formulating a land tenure and livelihood improvement framework that addresses all potential social, economic and/or access or dispossession impacts. (Please add if the Land Acquisition and Livelihoods Improvement Plan, or the Simplified Land Acquisition and Livelihoods framework is a requirement for electricity network rehabilitation projects.)

Table 5: E&S risks associated with sub-project

MDP investments	No risk	Low risk	Substantial risk
Transportation, Communication and Energy			
Rural telephone lines		X	
Electricity distribution in rural areas		X	
Renewable energy		X	





8. ENVIRONMENTAL AND SOCIAL LIABILITIES OF MDLF CONTRACTORS

ESMP is included in the tender documentation, so that potential bidders are aware of environmental and social performance standards expected from them and can reflect that in their bids.

This section depicts environmental compliance where break-down for the cost of each mitigation measure noncompliance.

Environmental and Social Monitoring Matrices (ESMM) and provisional environmental management guidelines for construction of sub-projects (Annex 1); to be abide to.

Attention: where EHSE applicable to bidding document and where Environmental Warranty is required, then financial provision under this section doesn't apply where EHSE regulations governs.

To enforce the compliance of environmental and social management, contractors are responsible on:

- Complying to **health and safety requirements** where they are to provide insurance for construction labors, staff attending to the construction site, citizens for each sub-project, the insurance requirements and clauses are stated in the procurement manual and reflected in the bidding documents complying to the Palestinian labor law.

The Municipality, as an owner of construction works, will be responsible for enforcing compliance of contractor with the terms of the contract, including adherence to the ESMF and the sub-project sectorial ESMP.

The following procedures prevail, in addition to the supervisor engineer judgment:

- Deduction of environmental noncompliance is added as a clause in the Bill of Quantities (BOQ) section, referring to annex in the bidding document detailing the deduction procedures;
- Environmental penalties shall be calculated, and deduction are to be included in each submitted invoice;
- Mitigation measures in ESMM annexed to ESMP is the reference for environmental notes and penalties;
- Each impact depicted in the ESMM if not properly mitigated to be counted an environmental/social note.





- For minor infringements and social complaints, an incident which causes temporary but reversible damage, the contractor will be given environmental and social note/ stop and alert to remedy the problem and to restore the environment. If reviewing the action by the Municipality Engineer showed that restoration is done satisfactorily no further actions will be taken;
- For social notes: the municipality engineer will stop and alert the contractor to remedy the social impact, the municipality engineer will follow the issue until solved. If contractor didn't comply to remediation request, stop will be considered under no excused delay;
- If the contractor hasn't remedied the environmental impact during this given time, the Municipality Engineer/supervisor engineer in cooperation with Local Technical Consultant will:
 - o stop the work and give the contractor an environmental and social note correlated to financial penalty according to the non-complied mitigation measure depicted in the bidding document and the following procedures for National Competitive Bids and Shopping Bidding Documents;
 - o The Municipality engineer after the given time frame is to review the action, if engineer sees that restoration is done satisfactorily no further actions will be taken, otherwise and if Contractor hasn't remedied the situation within 1 day any additional days of stopping work will be considered no excused delay;
- When municipality engineer issues an environmental/social note, it might depict one or more environmental penalty;
- If repeating the noncompliance and penalties approached (3-5) % of the contract value, the Municipality Engineer will raise the formal recorded environmental and social notes and the deduction history to MDLF in order to tack a legal action.

Table 3: The form of environmental/ social note

Date/ hour:	
Project Name:	
Municipality:	
Site Location:	
Contractor:	
Municipality Supervision Engineer:	
Contractor representative at site:	
Local Technical Consultant:	





The Environmental and Social Note (Including one or more notes referring to ESMM

1.	
2.	

This is a shopping bid and the following procedures will be prevailed: Procedures for National Competitive Bids and Shopping Bidding Documents:

As mentioned above, environmental and social notes might contain one or more environmental penalty applicable for deduction.

- For social notes: stop and alert the contractor to remedy the action;
- For environmental notes: refer to the ESMP for the note to verify how many notes illustrated in the note;
- Deduction rate starts with 0.1% of contract value; and
- Deduction rate increase by 0.05% of the contract amount after each fifth note.

For National Competitive Bids:

Table4 : ESMP Compliance Penalty for National Competitive Bids

ESMF Compliance Penalty		
No.	Environmental and Social Note	Penalty
1	1	Stop and alert
2	2+3+4+5+6	Stop and deduct 0.1% of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 150 Euro
3	7+8+10+11+12	Stop and deduct 0.15% of the contract amount for each mitigation measure in the environmental note





	Minimum amount of deduction is 22.5 Euro
3+1	Next five notes Each 5 notes + deduction would be: $N = \text{percentage of deduction of } (N-1) + (0.5 * \text{percentage of deduction of } (N-1))$ For example: Stop /Deduct 0.1%+0.05(0.1%) of the contract amount for each mitigation measure in the environmental note. Minimum amount of deduction is 300 Euro
5	Note +1 If penalty rate approach 5% of contract cost it is recommended to stop work and send official request to MDLF of the proposed action according to bidding documents and procurement manual

Deduction is to be calculated by the Municipality Engineer and to be reviewed by the LTC Engineer where he is to consider the environmental Note (N), and the deduction for N.

Deduction for $N = [\text{percentage of deduction of } (N-1) + (0.5 * \text{percentage of deduction of } (N-1))] * \text{contract Amount}$.

If the Penalties Rate approach 5% of Contract cost its recommended to stop work, and send official request to MDLF of the proposed action according to bidding documents and procurement manual.

Municipality can decide if a mitigation measure has a significant impact and might municipality require setting its non-compliance penalty rate based on its significance.

9. ENVIRONMENTAL AND SOCIAL MONITORING AND COMPLAINTS MECHANISM

9.1 Environmental and Social Monitoring

Environmental and social monitoring will be an integral part of MDLF's management work in the course of the project implementation. The MDLF (Environmental and Social Officers and or LTCs) and Municipality Supervision Engineers will be responsible to ensure that contractors works are familiar with ESMF and instruct workers/personnel on the compliance with the ESMF and the project sector ESMP.

The concerned municipality will conduct regular on-site supervision of civil works to verify contractors' adherence to the requirements set out in ESMPs following Environmental and Social Liabilities of MDLF





Contractors. MDLF consultants or teams conduct supervisory and environmental and social monitoring visits.

Reporting of the status of environmental and social performance under the MDP cycle to include overview of deviations/violations of ESMPs encountered over the report period, instructions given to the contractors for addressing non-compliance and identified issues, and follow-up actions on the revealed outstanding matters.

For monitoring and evaluation, MDLF experts utilize Checklist attached in Annex 3 to facilitate comparing environmental and social mitigation measures recorded in the appraisal stage and what is implemented on ground. Further details regarding social standards monitoring are depicted in the Land Acquisition and Livelihood Plan, which the municipality are to implement, MDLF are to monitor.

9.2 Complaints Mechanism

The Palestinian Council Resolution No. 60 in 2009 and the amendment of 2015 mandating the development of a complainant's mechanism is forcing for municipality / MoLG applies for Municipal Development Program Phase Four.

The municipality is to ensure availability of documentation of complaints and responses, timely responses, a log of all complaints received-date received, date responded to, type of response, etc.

The proposed procedure that municipality will follow through the implementation of MDP4 project:

Complaints procedures depend on the nature of complaint submitted by citizens. Some complaints are submitted to the municipality, and then submitted to the concerned department or person in charge to resolve the matter. In cases where the municipality is unable to resolve the complaint, it will then be transferred to the regional directorate or to the Ministry of Local Government (MoLG) either through the project coordinator, or the citizens themselves. The process reads as follows:

- 1- Citizen submit their complaint to the municipality.
- 2- The entity which receive the complaint shall reply to it either solving the problem of the complaint or informing the person making the complaint that they are studying the complaint and they will reply to the complaint on a specific date (the reply shall be in time less than 28 days). In the event the concerned Directorate provided a negative response or was unable to provide feedback, the citizen may then make a complaint to the Complaints Department at the MoLG, as follows:





- a. Submit a written complaint annexed to it all required documents concerning the complaint if found. Citizen must receive a copy of the receipt.
- b. The Complaints unit pursues with the complaint following the procedures.
- c. Citizen must receive a written response regarding their complaint within one (1) week at minimum.

Accepting or Rejecting the Complaint

1. Employee in charge of handling the complaint must inform the complainant about the accepting or rejecting of the complaint within three (3) days at most, since the submission of the complaint.
2. In the event the employee in charge of handling the complaint submitted the complaint to a specialized complaint unit, the unit must also submit an accepting or rejecting of the complaint within three (3) days at most.
3. In the event the complaint was accepted, the complainant will receive an officially-stamped Review Card with the following data:
 - a. Complainant's Name or Their Legal Representative
 - b. Complainant Address
 - c. Complaint Title
 - d. Review Date
 - e. List Annexes Submitted with the Complaint

Means of Communicating to the Complaints Department:

1. Directly contacting the MoLG
2. Contacting Hotline
3. Contacting the website of the MoLG
4. Provide a written complaint as stated in the system

The municipality should report to the MDLF of all the complaints through continuous recording in the weekly reports and/ or through site visits, so that the MDLF and/ or the LTC will intervene to solve the issue if the municipality was not able to solve or mitigate it.

10. ANNEXES TO ESMP

1. Annex 1: Environmental and Social Management and Monitoring Plan Matrix for Electricity/Energy Subproject
2. Annex 2: Health and safety issues in photovoltaic (PV) system installation and solar project operation
3. Annex 3: Environmental and Social Management Checklist
4. Annex 4: Commitment Letter regarding to COVID 19
5. Annex 5: Code of Conduct for Workers
6. Annex 6: Safety Orientation Form for Workers



Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
Construction	Risks during maintenance activities (electric shocks, fallen objects, cutting wires).	Maintenance activities should be carried out in off-peak periods.	Municipalities/contractor	Municipality and Supervision Engineer	Municipality
	Electricity cut off due to maintenance activities.	Follow safety measures and conditions.	Municipalities/contractor	Municipality and Supervision Engineer	Municipality
	The risk of COVID-19	Contractor/Municipality should commit to the Ministry of Health/WHO guidelines regarding to Covid-19 Epidemic Disease including but not limited to: 4. Social distancing between workers. 5. Provision of full PPE for workers including face mask. 6. Hand sanitizers should be available and accessible for workers and site attendees. 7. Orientation for workers about how to deal with different issues during the emergency situation under COVID 19.	Municipalities/contractor	Municipality and Supervision Engineer	MDLF / Consultant





Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
		<p>8. Sick workers or workers who should follow the Moh instructions including isolation in the quarantine place for specific number of days, knowing that Moh is responsible to provide the required medical care.</p>			
	<p>Labors Conditions at the workplace</p>	<p>Contractor/Municipality is not allowed to employ workers under the age of 18. All workers should be covered by a valid insurance and Health care. Workers should be provided with proper PPE's and trained on using them. Code of conduct should be oriented for workers. Complaints channels should be available for workers. Ensure all workers are trained in term of OHS measures</p>	<p>Municipalities/contractor</p>	<p>Municipality and Supervision Engineer</p>	<p>MDLF</p>



Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
Operation	Any other potential of accidental environmental and social impact	Mitigation measure requested by municipality engineer pursuant to ESMF and guidelines to contractors for projects	Municipalities/contractor	Municipality and Supervisor Engineer	MDLF & Consultant
	Electricity poles hinder the movement and traffic.	Relocate electricity poles.	Municipality	Municipality and Supervisor Engineer	Municipality
		Routine checks to installed poles	Municipality	Municipality and Supervisor Engineer	Municipality
	Cables are close to houses and facilities and might risk rise	The cables, which are very close to houses, should be replaced and insulated.	Municipality	Municipality	Municipality
	Risk of accidents (electric shocks, fallen objects, cutting wires)	Ensure personnel are following health and safety procedures during supplying and installation, refer to Annex 18.	Municipalities/contractor	Municipality and Supervisor Engineer	Municipality
		Close work area	Municipalities/contractor	Municipality and Supervisor Engineer	Municipality
	The risk of COVID-19		Municipalities/contractor	Municipality and Supervisor Engineer	MDLF / Consultant

Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
	<p>Labors Conditions at the workplace</p>	<p>Contractor/Municipality is not allowed to employ workers under the age of 18. All workers should be covered by a valid insurance and Health care. Workers should be provided with proper PPE's and trained on using them. Ensure all workers are trained in term of OHS measures Code of conduct should be oriented for workers. Complaints channels should be available for workers.</p>	<p>Municipalities/contractor</p>	<p>Municipality and Supervision Engineer</p>	<p>MDLF</p>
	<p>Electricity cut off</p>	<p>Ensure Informing personnel with time of cut off</p>	<p>Municipalities/contractor</p>	<p>Municipality and Supervision Engineer</p>	<p>Municipality</p>





Phase	Impact	Mitigation Measure	Operation / Responsibility	Supervision	Monitoring
	Any other potential of accidental environmental and social impact	Mitigation measure requested by municipality engineer pursuing to ESMP and guidelines to contractors for related projects	Municipalities/contractor	Municipality and Supervision Engineer	MDLF & Consultant

4 ANNEX 2 : HEALTH AND SAFETY ISSUES IN PHOTOVOLTAIC (PV) SYSTEM INSTALLATION AND SOLAR PROJECT OPERATION

(These procedures can be incorporated into bidding documents)

The direct environmental and social impacts in such projects are considered small. However, the installation of such systems is associated with the risk of potential accidents during transportation, installation, or during testing without adhering to health and safety procedures for workers and visitors. Health and safety requirements are as follows:

- The contractor/supplier is responsible for implementing all safety procedures during transportation, installation, inspection and testing of each part of the system.
- The contractor/supplier is responsible for the safety of workers and visitors at the work site.
- The contractor/supplier is responsible for implementing all health and safety procedures in accordance with Palestinian laws.
- Workers must wear jackets, gloves, fluorescent clothing, etc., or whatever the work site may require.
- The contractor must limit and minimize access to the work site during implementation.
- The contractor must provide a first aid kit, in addition to fire prevention/extinguishing supplies.
- The contractor is responsible for installing the structure that will hold the solar cells and ensuring its implementation according to design.

In addition, for workers on the site of installing solar energy systems:

- The contractor must provide a specialized crew for such works and have documented experience and/or certificates in this field
- Cover solar panels with an opaque cover (non-permeable to light) to prevent the generation of electricity while handling them.
- Solar panels produce electricity when exposed to sunlight. The direct current generated by a single exposed panel may exceed 30 volts. This voltage can cause harm to the human body.
- Use safe equipment and tools (insulated tools, insulated gloves, insulated shoes, etc.) that are approved for use in electrical work.
- Adherence to safety and prevention instructions for all parts of the system, including cables and wires, connectors, direct current breakers, transformers, etc.
- Use cables, wires, circuit breakers, and transformers suitable for solar energy systems.
- All exposed metal must be grounded.
- The grounding conductor of the device must be a bare wire or green wire.
- The device's grounding conductor must be sized to handle the highest current that can flow in the circuit.
- connect solar panels Only with similar outputs, and install them in parallel. If three panels are connected in series, the total voltage is equal to the sum of the voltages of all the individual panels, and this voltage is very dangerous to the human body.
- Connect only panels or series of panels that have the same voltage in parallel. If the panels are connected in parallel, the total current is equal to the sum of the individual panels or the sum of the series of panels.



- If an inverter is used to connect a solar energy system to the public electricity network, the inverter must be automatically disconnected in the event of an interruption in the power coming from the public network. If the inverter operates in a self-contained binary system, it can continue to supply current to the loads.
- It may sometimes be necessary to check the system if it is not working properly. In this case safety should be the primary concern, both in planning before going to site, and during the actual inspection.

Safety issues during inspection and operation of solar energy system:

Before you start inspecting your solar energy system, you should familiarize yourself with the electrical installation. For example, how many solar panels make up the source circuit? What are the system voltages? the current? How many circles? Are there protection devices against surges? How to disconnect the device? Is the necessary safety equipment available?

When arriving at the location of the solar energy system:

- All jewelry must be removed.
- Walk around the solar energy system and record any apparent hazards in a system log or notebook. Photograph the system and any visible hazards.
- Determine the location of safety equipment, fire extinguishers, etc. and ensure their serviceability.
- Compare the existing electrical installation of the system to the electrical diagrams.
- Locate and inspect all subsystems such as transformer and loads.
- Determine if the equipment is grounded and how and where it is grounded. Check if the DC and AC grounding is common.
- Locate and inspect the disconnect switches.
- Disconnect the source circuit and check all open circuit voltages to verify that the disconnected switch is working properly.
- Measure the voltage from each conductor to ground, as well as from each line to the other.
- Make sure the work area is free of obstacles, especially the area behind you.
- Do not disconnect the pre-wire before measuring voltages.
- Keep hands dry and/or wear insulated gloves.
- Work with only one hand if possible.
- Ask your colleague to stand near the circuit's breakers.
- When disconnecting a wire, do not leave its end exposed. Use adhesive tape to cover it temporarily.
- Reconnect the wires from one source circuit.



5 ANNEX 3: ENVIRONMENTAL AND SOCIAL MANAGEMENT CHECKLIST

(To be filled by environmental and social MDLF consultant)

Site visit date:
Sit visit No:
Environmental/Social Consultant:

<u>General Information of the sub-project:</u>
Sub-project Name:
Municipality:
Sub-project start date:
Sub-project completion date:
Health insurance start date:
Health insurance completion date:
No. of complaints⁵:
No. of workers during the site visit:
No. of equipment in operation during the site visit:
Storage Facility at site:

<u>Compliance to ESMP and other ESHS plans:</u>	Yes	No	Not applicable	Correction action in case of non-compliance recorded
All workers have been oriented on the following: sub-project scope of work				
Their rights, contracts contents, annual and sick leaves...etc.				



⁵ Complaints to be recorded using the complaints form inserted in Annex 19

Code of conduct content					
Occupational health and safety measures					
Grievance mechanism channels					
All workers have been provided with PPEs and safety tools on free charge					
All workers have been provided with COVID-19 precautions tool					
First aid box, toilet, clean drinking water, workers rest, telephone number of complaints are available at site					
Sign include telephone numbers of police, hospital, civil defense is available at site					
Contractor shares the work plan with surrounding communities and affected parties prior starting the work					
Dust control					
Site housekeeping					
Transfer of solid wastes to legal landfill					
Worker's commitment to wear PPEs					



Worker's commitment to COVID-19 precautions measures					
Protection of all excavated/open areas as per technical specifications					
Safe scaffolding system at site					
Proper safety measures of working at height					
Rehabilitation of any damaged underground infrastructure or service utilities					
Informing the citizens about the work program prior 24 hrs of work in particular if any service utility will be cut off					
Proper sheeting of trucks and transportation equipment transfer materials to construction site					
Safe access to citizens houses, shops and other properties					
Using of safety and traffic warning and directional signs at site					
Alternative roads with presence of directional signs in case road closed due to construction activities					



Proper safety measures had been considered in case works are implemented close to schools, university, hospital, health centers.				
Archeological or historical places had been recorded during excavation works				
Applicability of chance find procedure				
Application of traffic management plan (if any) Ex. Splitting Road to more than one section to avoid traffic congestion				
Application of waste management plan (if any)				
Impacts on trees or green areas close or and in project site				
Impact on private properties and lands close or and in project site				
Recording of accidents at site and in case it is occurred how the contractor deal with				



Additional Notes by Environmental and Social Consultants:

Explanatory Photos: