



# ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

**IPA 2014**

***DRAFT***

Direct Award to the Innovation Fund – New products and  
services developed through research commercialization in  
the SMEs

14SER01/08/31

**March 2019**



## OVERVIEW

This Environmental and Social Management Framework (ESMF) specifies environmental and social procedures for implemented projects to adhere to which are consistent with Serbian national legislation. during the implementation of the IPA 2014 Direct Award to the Innovation Fund – New products and services developed through research commercialization in the SMEs. The purpose of ESMF is to outline Innovation Fund policies and processes and to outline sub -grant beneficiaries' (implemented projects) obligations in screening and categorizing proposed activities according to their possible environmental impact, mitigating the risks, and defining the Innovation Fund (IF) monitoring activities, if and where required.

The ESMF specifies the procedures that the Action will have in place during implementation, with the objective that all implemented projects supported under the Action will be environmentally and socially sound and sustainable, and consistent with related EU policies and Serbian national legislation.

## BRIEF DESCRIPTION OF THE ACTION

### Outline of the Action

The primary context of this Action relates to the Competitiveness Sector under IPA II (2014-2020) for Serbia, as described by the relevant Competitiveness Action Document.

The rationale for this Action is to capitalize on the success of the IF's previously piloted Innovation Serbia Project (ISP 2011-2016). The ISP was rated as very successful in establishing and executing two grant programs (Mini Grants and Matching Grants) designed to provide financial support for boosting commercial R&D in Serbian SMEs.

### Target groups

The key target group of this Action is Serbian private innovative SMEs. The Action will contribute to the overall objective of this IPA sector by providing Serbian SMEs with two financing programs (**Mini Grants** and **Matching Grants**) crucial for early-stage technology development, leading to a potential increase in overall competitiveness.

### Objectives and outputs

The overall objective and impact of the Action is to increase the completeness of Serbian SMEs.

The Action includes two outputs, with the first one being the sustainable product/service developed by the supported start-ups through the **Mini Grants** program, while the second is the sustainable product/service developed by the supported SMEs through the **Matching Grants** program



The **Mini Grants** program is aimed at private young micro and small enterprises established in Serbia which are engaged in the development of technological innovations with a clear market need. This Program is designed to support the survival of companies during the critical phase of research and development and to allow the Serbian entrepreneurs to grow effective business capacities through which they will launch their innovations on the market. Projects under this Program are in duration of up to 12 months with financing of up to EUR 80,000, or up to 85% of the total approved project budget with a minimum of 15% of the total approved project budget provided by the enterprise, and can be used for post proof of concept, prototyping stage, IP protection, business plan preparation for mobilization of initial capital activities.

The **Matching Grants** program is designed for micro, small and medium enterprises established in Serbia looking for significant financial resources for the commercialization of research and development. The Program has the goal to stimulate further knowledge-based development of innovative enterprises, encourage establishment of partnerships with international partners and to increase the number of technology-based companies. Projects under this Program are in duration of up to 12 months with financing of up to EUR 300,000, or up to 70% of the total approved project budget with a minimum of 30% of the total approved project budget provided by the enterprise (60%/40% for medium enterprises), and can be used for R&D (technology development), new or significantly improved technologies, products and processes.

## ENVIRONMENTAL AND SOCIAL SUSTAINABILITY

Due to the limited size of the grants and therefore scope of activities, there are no significant activities and associated environmental and social impacts envisaged through the Mini Grants and the Matching Grants programs. The Action will not support environmentally-unfriendly technologies and practices.

The **Mini Grants** and **Matching Grants** programs supported from the Action will only support the Applicants which demonstrate that their proposed activities have no negative impact on environment, or that they have adequate plans to mitigate any possible environmental risks. Indication of environmental aspects, as well as impact assessment will be required when applicable and will be performed by an external Independent environmental and social management expert

With its support to increase the competitiveness of developing economies, the EU aims to help, among other, to understand and mitigate the factors that constrain their competitiveness. The European Commission believes that corporate social responsibility (CSR) is important for the sustainability, competitiveness, and innovation of EU enterprises and the EU economy (with note that Serbia is candidate country for EU membership and under strategical development to comply with EU acquis and practice). Companies should fit into the environmental, social and cultural niche within which they are functioning. To fully meet their corporate social responsibility, enterprises should have in place a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations and core strategy in close collaboration with their stakeholders.



Having in mind that the Action objective is competitiveness improvement, relevant elements of corporate social responsibility will be taken in account:

- **Primary suppliers** relevant environmental and social performance (“primary suppliers” are those suppliers who, on an ongoing basis, provide directly to the sub-grant beneficiaries goods or materials essential for the core functions of the sub-project)<sup>1</sup>; the promotion of social and environmental responsibility through the supply-chain, and the disclosure of non-financial information, are recognized as important issues;
- **Associated facilities** relevant environmental and social performance (“associated facilities” means facilities or activities that are not funded as part of the implemented projects and, in the judgment are directly and significantly related to the implemented project) .

Independent environmental and social management expert (IESME) will be engaged through the Action to assure sub-grant beneficiaries’ projects are environmental and social sustainability (considering corporate environmental and social responsibility relevant elements), by implementing environmental screening and monitoring procedure explained bellow.

## Exclusions

Based on the experiences from previous projects (Innovation Serbia Project 2011-2016 (IPA 2011) and Competitiveness and Jobs Project 2016-2018) under which the Mini Grants and the Matching Grants projects were implemented, it is anticipated that under this Action, the implemented projects will not be of large scale with significant impact on the environment and social aspects.

Consequently, **the Action will not finance:**

- Any activities which would have an irreversible and substantial environmental impact, or correspond to a legally mandatory EIA<sup>2</sup> procedure – listed in Annex I of EIA Directive (correspondent to World Bank Group -IFC Exclusion List Category A Project as per WB Safeguard policy on Environmental Assessment OP/BP 4.01.) and for projects listed in Annex II, when the national authorities decide that EIA is needed. This means that the Action will not finance activities

<sup>1</sup> In 2011 EC published a guide on Socially Responsible Public Procurement, explaining how to integrate social considerations into public procurement while respecting the existing EU legal framework

<sup>2</sup> EU acquis is strict for large scale/infrastructure projects, on the basis of Directive 2011/92/EU (known as 'Environmental Impact Assessment' – EIA Directive) or for public plans or programs on the basis of Directive 2001/42/EC (known as 'Strategic Environmental Assessment' – SEA Directive). The common principle of both Directives is to ensure that plans, programs and projects likely to have significant effects on the environment are made subject to an environmental assessment, prior to their approval or authorization. Consultation with the public is a key feature of environmental assessment procedures. Note: Directive 2014/52/EU amending the EIA Directive 2011/92/EU



for which a Full Environmental Impact Assessment is required/decided as per the Article 4 of national Law on Environmental Impact Assessment (Official Gazette of RS No. 135/2004 and amended in 2009 – 36/2009); by this law EU Directive 2011/92/EU is transposed in national legislation. A comprehensive exclusion list is given in Sub-law on the list of the projects needed EIA (Official Gazette RS 114/2008)<sup>3</sup> ;

- Any activities that would, e.g. affect natural habitats, forests, finance experiments or production of pesticides, or cause economic and social displacement, activities which involve land acquisition or any form of resettlement, as well as construction and rehabilitation activities, including very small, refurbishment or renovation activities or any scope of civil works.

## ENVIRONMENTAL REVIEW AND MONITORING PROCEDURE FOR MINI AND MATCHING GRANTS PROGRAM

The **Independent environmental and social management expert** (IESME) will conduct screening of projects that are preselected for financing (through the evaluation of Environmental Screening Questioners – ESQ), in order to assess the environmental and social impact of their proposed activities. The independent environmental and social management expert will also coordinate design of the environmental management plans and where applicable, monitoring of it during sub-grant beneficiaries' projects' implementation as well as ad-hoc environmental visits.

### Environmental review

During the Environmental review phase of the preselected Applications the IESME is responsible for:

- Review all assigned preselected Applications for conflicts of interest or the appearance of conflicts of interest in accordance with the IF Confidentiality and Prevention of Conflict of Interest Policy and inform the IF Program Managers if any issues exist;
- Assess all assigned preselected Applications, categorize and verify compliance of corresponding ESQs with the Environmental and Social Management Framework (ESMF);
- Sign ESQs of all assigned preselected Applications, thus confirming their ESMF categorization and compliance;
- For all assigned preselected Applications which require EMPs, provide guidance to the Applicants to formulate the appropriate EMPs and verify that the final EMP is compliant with the Environmental and Social Management Framework (ESMF).

<sup>3</sup> UREDBA O UTVRĐIVANJU LISTE PROJEKATA ZA KOJE JE OBAVEZNA PROCENA UTICAJA I LISTE PROJEKATA ZA KOJE SE MOŽE ZAHTEVATI PROCENA UTICAJA NA ŽIVOTNU SREDINU ("Sl. glasnik RS", br. 114/2008)



The Environmental review of the preselected Applications for the Mini Grants and the Matching Grants program encompasses the following steps:

- **Screening** of Applications that are preselected for financing (through the evaluation of Environmental Screening Questioners – ESQ and other documents from application, when needed), in order to assess the environmental impact of their proposed activities, with taking in account social responsibility; an Environmental Screening Questionnaire (ESQ) will be required for every Application submitted;
- **Categorization** of preselected Applications will be categorized as following: applications significant environmental risk (Category A, subject of exclusion, will not be financed through the Action, see chapter Exclusions below) or moderate environmental risk (Category B; EMP needed) or very small environmental risk (Category C).

In regards to the Environmental Screening Questionnaire (ESQ) evaluation, the preselected Applicants will be informed about the results of the ESQ evaluation only if the Environmental Management Plan (EMP) is required. Independent environmental and social management expert evaluates the ESQs of the preselected applicants. When the project requires the preparation of the EMP, it is the responsibility of the Applicant to prepare the EMP and submit it within two (2) weeks after feedback on the ESQ is provided. The guidance on the content of the EMP is provided in the Environmental and Social Management Framework<sup>4</sup> available online on the IF website<sup>5</sup>. In cases where the project requires an EMP and the Applicant does not prepare it, that Application would become ineligible for further evaluation.

- **Conditionality** - Any activities corresponding to the category B sub-grant project will be required to have an Environmental Management Plan (EMP) in place prior to approval that would identify potential environmental and social impacts and provide adequate mitigation measures. The Independent environmental and social management expert will also coordinate design of the environmental management plans; the preselected Applicant is responsible for preparing the EMP prior to the final approval for financing. If the Applicant refuses to prepare the EMP, the Application would be ineligible for financing from the Action. IESME should check the Request and the EMP to insure, as a minimum, consistency in terms of: (a) identifying the same priority environmental issues, mitigating measures and implementing responsibility, (b) monitoring program and (c) institutional arrangements for environmental management. The IF will include Applicant/sub-grant beneficiary commitment to obey requirements set forth in the EMP into any grant agreement. The sub-grant beneficiary will be required to show best effort to ensure that the funded activity is carried out with attention to good environmental management. The sub-grant beneficiary will be

<sup>4</sup> As per Environmental and Social Management Framework (ESMF) the Applicant is obliged to follow the environmental procedures.

<sup>5</sup> [www.innovationfund.rs](http://www.innovationfund.rs)



held responsible for all mitigation measures that have been listed in the EMP;

- **Public consultation** is considered as mandatory in the process of EMP preparation. The applicant is responsible for disclosing the EMP (both the draft ESMP used for consultations and the final EMP revised following comments received during consultations) in a public place (library, municipal or government building etc.) near the project site or/and on the enterprise website, and place a notification in the local media (e.g. newspaper, social media, web page) as to where the EMP may be viewed, with a suitable feedback mechanism in place for comments or queries (both on-line ). Data on where and how the EMP was disclosed should be a part of the Final EMP. The information disclosed will not give away any of the confidential information related to the project itself but will sufficiently explain how the financed activities will mitigate any of the associated environmental and social impacts. Due to the nature of the sub-project, the Applicant may not be required to hold a public consultation meeting, if the disclosed ESMP on a website provides for an adequate feedback mechanism for comments or queries. This decision will be made by the Independent Environmental and Social Management Expert (upon request by the Applicant) in consultation with the Evaluation Committee of the Mini and Matching Grants Program, if needed.

The output of this phase is a table overview of the Environmental status of preselected projects (do the preselected projects satisfy the Environmental conditions, specifically review and approval of ESQ and EMP), signed by the IESME. **Only preselected projects that satisfy the Environment review will be eligible for the next phase of the project evaluation process: final decision for financing which is made by the IF's independent Investment Committee.**

### Monitoring procedure

The Awardee (awarded project for financing – implemented project) is required to carry out the project in accordance with the provisions of the Environmental and Social Management Framework and the Environmental Management Plan (where applicable) and to take in a timely manner all measures to enable the IF to monitor the provisions of the Environmental Management Plan.

The Independent environmental and social management expert will also monitor EMP during sub-grant beneficiaries' projects' implementation as well as perform ad-hoc environmental visits, where applicable. As part of normal quarterly monitoring activities, the Innovation Fund will verify that the Awardee is conducting all environment/social related actions and reporting in accordance with the EMP. Fulfillment of these requirements will be confirmed by the IESME.

The IESME will confirm that the sub-grant beneficiaries' project is:

- The project is in compliance with the Environmental Management Framework;



- The project is in compliance with the approved Environmental Management Plan.

IESME will submit Environmental and Social Reports for Category B (EMP) implemented projects on quarterly bases that confirms that the project implementation is conducted in compliance with EMP environmental requirements. IESME will also confirm the compliance of the implemented project's environmental status through the IF's Quarterly Report Compliance Checklist - Part IV: Environmental Review (Category B Projects only).

During the beginning of the project implementation, IESME with IF staff will conduct the preliminary Environmental monitoring visit of the implemented projects under the Category B, during which the Awardee's reporting obligations and timelines will determined based on the EMP. Additional Environmental monitoring visits will be determined and conducted on case by case basis, depending on the project's specific EMP requirements, as well as ad-hoc Environmental monitoring visits to Category C implementing projects.

The format for a comprehensive ESQ and EMP is presented in Annex A & B.





## PUBLIC CONSULTATION DETAILS AND MINUTES OF MEETINGS FOR THE ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK

[ENCLOSED AS **ANNEX D**]

**The final version of the ESMF will contain:**

- Manner in which notification of the consultation was announced: media(s) used, date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
- Location(s) consultation(s) was (were) held
- Who was specifically invited (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office), if applicable)
- List of Attendees (Name, organization or occupation, contact details)
- Meeting Agenda?
- Summary Meeting Minutes (Comments, Questions and Response by Presenters)
- List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities.



## ANNEX A

### ESQ

#### ENVIRONMENTAL SCREENING QUESTIONNAIRE - TEMPLATE

<b>Title of the Project:</b>	<input type="text"/>
<b>Project IF ID:</b>	<input type="text"/>
<b>Applicant Company Name:</b>	<input type="text"/>
<b>City/Municipality:</b>	<input type="text"/>
<b>Contact email address:</b>	<input type="text"/>
<b>ENVIRONMENTAL AND SOCIAL CHECKLIST QUESTIONNAIRE</b> (must be filled out and filed for every application)	
CRITERIA	ANSWER YES or NO (unless otherwise stated)
Does the proposed activity require a FULL Environmental Impact Assessment as per the Serbian Law on Environmental Impact Assessment (list of projects for which full EIA is mandatory/decided)? <b>If yes, this activity cannot be financed.</b>	<input type="text"/>
Does the existing enterprise have valid operating permit, licenses, approvals etc.? If not, please explain. Permits to screen for include: construction permit, operational/use permit, urban permit, water management permit...	<input type="text"/>
<i>If not, will the grant financing be used to correct this condition?</i>	<input type="text"/>
Does the existing enterprise have a valid environmental permit (or is in the procedure of obtaining an environmental permit as per the Serbian laws) and does the proposed activity fall under those for which this permit was issued?	<input type="text"/>
Does the existing enterprise have a valid water management permit that calls for special investments or measures for the enterprise's wastewater releases (or is in the procedure of obtaining this permit as per the Serbian laws)?	<input type="text"/>
Does the existing enterprise need to follow specific Serbian environmental regulations regarding air emissions, water use or wastewater discharge and solid waste management?	<input type="text"/>
Are there any significant outstanding environmental fees, fines or penalties or any other environmental liabilities (e.g. pending legal proceedings involving environmental issues etc.)	<input type="text"/>



<i>If so, will the grant financing be used to correct this condition and please explain?</i>	
Have there been any complaints raised by local affected people or groups or NGOs regarding conditions at the facility? <i>If so, will the grant financing be used to remedy these complaints?</i>	[ ] [ ]
Does the existing enterprise take care about primary suppliers' environmental and social performance or practice Socially Responsible Public Procurement? <i>If possible, explain the answer</i>	[ ] [ ]
Does the existing enterprise take care about associated facilities (if applicable) relevant environmental and social performance? <i>If possible, explain the answer</i>	[ ] [ ]

Proposed Activity	
CRITERIA	ANSWER YES or NO (unless otherwise stated)
Will the activity generate water effluents (wastewater) that may require special treatment, control or the water management permit?	[ ] [ ]
Will the activity air emissions which would require special controls in order to ensure compliance with the Serbian standards?	[ ] [ ]
Will the activity generate noise levels that would require control measures to ensure compliance with the Serbian standards? Will the noise levels impact particularly sensitive receptors (natural habitats, hospitals, schools, local population centers)?	[ ] [ ]
Will the activity consume, use or store, produce hazardous materials that: <ul style="list-style-type: none"> <li>• require special permits or licenses</li> <li>• require licensed or trained personnel</li> <li>• are outlawed or banned in EU or Western countries</li> <li>• are difficult, expensive, or hard to manage</li> <li>• are inconsistent with PPAH recommendations</li> <li>• may cause soil and water pollution or health hazards if adequate control measures are not in place</li> </ul>	[ ] [ ]
Will the activity generate solid waste that may be considered hazardous, difficult to manage, or may be beyond the scope of regular household waste? <i>(This may include, but not be limited too, animal carcasses, toxic materials, pesticides, medical waste, cleaning materials, flammables etc.)</i>	[ ] [ ]
Will the activity be located within or close to officially protected areas or areas under consideration by the Government for official protection status? And will the activity potentially impact areas of known significance to local, regional or	[ ] [ ]



national cultural heritage?	
Will the activity involve import of living organisms, e.g. saplings, insects, animals, etc. or works that can impact sensitive environmental receptors?	
Has the local population or any NGOs expressed concern about the proposed activity's environmental aspects or expressed opposition?	
Is there any other aspect of the activity that would – through normal operations or under special conditions – cause a risk or have an impact on the environment, the population or could be considered as a nuisance?	

The Applicant, in signing this form proves that the grant activity will not involve land acquisition, any form of construction, or will promote any activities incompatible with the ESMF. In addition, the Applicant is aware of the EIA requirements as per the Serbian Law and certifies that there are no Full Environmental Impact Assessment reports required/decided.

Form filled out by (Applicant)	
Date	
Name	
Title	
Signature	

Form checked by (IF Independent Environmental and Social Management Expert)	
Project category is: A____, B____, C____	
Date	
Name	
Title	
Signature	



## ANNEX B EMP

### ENVIRONMENTAL MANAGEMENT PLAN - TEMPLATE

*Environmental and Social Management Framework specifies environmental and social procedures for implemented projects to adhere to, including Environmental Management Plan, which are consistent Serbian national legislation.*

Project IF ID: [ ]  
\_\_\_\_\_

#### I. MITIGATION PLAN

No.	Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
#	Construction	• [ ] • [ ] • [ ] • [ ] • [ ]	[ ]	[ ]	[ ]	[ ]



No.	Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
Operation	[Operation ]	<ul style="list-style-type: none"> <li>[ ]</li> <li>[ ]</li> <li>[ ]</li> <li>[ ]</li> <li>[ ]</li> </ul>	[ ]	[ ]	[ ]	[ ]

\* Items indicated to be the responsibility of the contractor shall be specified in the bid documents



## II. MONITORING PLAN

No.	Phase	What parameter is to be monitored?	Where is the parameter to be monitored?	How is the parameter to be monitored/ type of monitoring equipment?	When is the parameter to be monitored- frequency of measurement or continuous?	Monitoring Cost What is the cost of equipment or contractor charges to perform monitoring?	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
#	Construction							
#	Operation							



### III. PUBLIC CONSULTATION DETAILS AND MINUTES OF MEETING FOR THE ENVIRONMENTAL MANAGEMENT PLAN

Provide details on:

- Manner in which notification of the consultation was announced: media(s) used, date(s), description or copy of the announcement
- Date(s) consultation(s) was (were) held
- Location(s) consultation(s) was (were) held
- Who was specifically invited (Name, Organization or Occupation, Telephone/Fax/e-mail number/address (home and/or office))
- List of Attendees (Name, organization or occupation, contact details)
- Meeting Agenda
- Summary Meeting Minutes (Comments, Questions and Response by Presenters)
- List of decisions reached, and any actions agreed upon with schedules and deadlines and responsibilities.





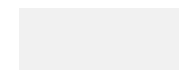
## ANNEX C

### SAMPLE of FILLED-OUT EMP part I & II

### ENVIRONMENTAL MANAGEMENT PLAN

#### EXAMPLE ONLY: USE OF SOLAR PANELS IN ELECTRICAL POWER PRODUCTION

Project IF ID: XXXX

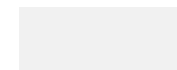


#### I. MITIGATION PLAN

No.	Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
1	Design phase	Certain solar cells may require more energy and raw materials to produce, or may use hazardous and harmful materials in their production	Obtain sufficient information from producer  Look for certificates or statements how the panels are produced  Select the more “environmentally friendly option”	Variation in costs of panels may be incurred	The Grant recipient	



2	Design phase	Placement of solar panels on rooftops or buildings in populated areas may have an aesthetic impact or may impact a monument or protected building	<p>Careful sitting of the panels</p> <p>Ensure that the building is not a historical site, that there are no special instructions as to the façade and appearance, and ensure approvals are received by all designated and responsible local authorities</p>	N/A	The Grant recipient	
3	Design phase	Placement of solar panels in natural areas needs to be carefully designed in order to minimize the aesthetic impact and land disturbance, including impacts from high temperature or magnetic fields from the panels/wiring	<p>Ensure the solar panels are placed in a remote area that is barren and not under use of any kind. In addition, ensure the site is not close to any protected areas, grazing lands or important habitats as well as sensitive recipients/groundwater, surface water</p>	This may have an impact on the overall design of the Project and may therefore incur some additional costs	The Grant recipient	



No.	Phase	Issue	Mitigating Measure	Cost of Mitigation (If Substantial)	Responsibility*	Supervision observation and comments (to be filled out during supervision)
4	Construction	Dust, noise, emissions and vibrations generated during construction activities may be a nuisance to nearby human or animal populations	Ensure regulatory requirements to limit noise are followed and noise is kept to allowed working hours and intervals as per the relevant regulation Do not allow machinery to idle Water down working areas to limit dust generation	Minor  Cost of water tank to come on site: 150-250 €	Contractor /Grant recipient	
5	Construction	Leaks or spills from machinery may negatively impact the soil and groundwater	Spill control mechanism will be in place Machinery used will not be serviced or repaired on site	Minor	Contractor /Grant recipient	
6	Construction	Improper waste management may pollute the environment and pose a threat to the animals in the vicinity of the site	Ensure rapid collection of wastes to avoid scattering All wastes generated will be disposed of at an authorized landfill site There will be no open burning of wastes	Disposal at an authorized site for 1 ton (with 50 km transport): 150€	Contractor /Grant recipient	
7	Operation	Use of pesticides or other hazardous chemicals to treat or to clean the solar panels will impact the surrounding environment	Ensure compounds are evaluated for their environmental impact and potential for illness or injury due to single acute exposure; Avoid hazardous compounds or replace with less hazardous substance, Ensure no leaks on the surrounding areas, Ensure proper storage of chemicals on leak-proof surfaces and use only by trained	May impose additional costs for more expensive eco solutions	Contractor /Grant recipient	



8	Operation	Use of pesticides or other hazardous chemicals to treat or to clean the solar panels will impact the occupation safety	Ensure occupation safety measures			
9	Decommissioning	Hazardous materials contained within the panels may be released into the nature and impact the environment (soil, ground and surface water) in case of breaks or decommissioning of the panels	Ensure workers are trained in adequate decommissioning procedures with spill control measures in place	Not significant	Contractor /Grant recipient	

\*Items indicated to be the responsibility of the contractor shall be specified in the bid documents



## II. MONITORING PLAN

No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
1	Design phase	Environmentally friendly production process of panels	Through tech. specifications of panels	Through receiving and keeping all specifications	Prior to procurement	May have an overall cost increase effect	Grant recipient	



No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
2 & 3	Design phase	Placement of solar panels needs to be approved by the designated and responsible local authority	Through adequate supporting paperwork	Through receiving and keeping all of the necessary permits	Prior to construction works and preferably prior to application for grants	None	Grant recipient	



No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
4	Construction	Dust, noise, emissions and vibrations	On Project site	Periodically check sound levels at the work site to ensure it is within legal limits and as per local permitting. Through complaints (if area is populated)	During construction works constantly	Minor – should be included in contract for works	Contractor /Supervisor	



<b>No.</b>	<b>Phase</b>	<b>What</b> <i>parameter is to be monitored?</i>	<b>Where</b> <i>is the parameter to be monitored?</i>	<b>How</b> <i>is the parameter to be monitored/ type of monitoring equipment?</i>	<b>When</b> <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	<b>Monitoring Cost</b> <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	<b>Responsibility</b>	<b>Supervision observation and comments</b> <i>(to be filled out during supervision with reference to adequate measuring reports)</i>
5	Construction	Leaks or spills from machinery	On Project site	Visually on surrounding areas, log of all accidents on site to be filled out	During construction works – constantly	Minor – should be included in contract for works	Contractor /Supervisor	





No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
6	Proper waste collection and management	On Project site	Daily supervision of waste collection Ensure no open burning is taking place Keep receipts from authorized landfill	Daily	Minor – should be included in contract for works	Contractor/Supervisor	Proper waste collection and management	



No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
7	Operation	Use of less hazardous pesticides or other chemicals to treat or to clean the solar panels	On Project site	Visual inspection of work site to ensure adequate protection from chemicals to be used is in place, safety	Visual inspection of site after maintenance Records kept	May have an overall cost increase effect	Contractor/Supervisor  (in addition to self-monitoring by Operator / grant applicant)	



No.	Phase	What <i>parameter is to be monitored?</i>	Where <i>is the parameter to be monitored?</i>	How <i>is the parameter to be monitored/ type of monitoring equipment?</i>	When <i>is the parameter to be monitored- frequency of measurement or continuous?</i>	Monitoring Cost <i>What is the cost of equipment or contractor charges to perform monitoring?</i>	Responsibility	Supervision observation and comments (to be filled out during supervision with reference to adequate measuring reports)
8	Decommissioning	Hazardous materials contained within the panels may be released during decommissioning	On Project site	Ensure no breaks or spills In case of spills ensure spill management procedure is followed	Visual, log of all breaks and spills	Minor – should be included in contract for works	Contractor/Supervisor	



## ***ANNEX D***

### ***MINUTES FROM THE PUBLIC DISCUSSION ENTITLED “PROJECT ENVIRONMENTAL AND SOCIAL MANAGEMENT FRAMEWORK”***

#### ***ENCLOSURES:***

- 1: NOTIFICATION OF THE PUBLIC DISCUSSION `***
- 2: INVITE LIST***
- 3: LIST OF ATTENDEES***
- 4: PRESENTATIONS FROM THE PUBLIC DISCUSSION***