





#### TERMS OF REFERENCE

#### ToR

### for National Consultant on pre-feasibility study on photovoltaic electricity production facilities

**Post title:** National Consultant on development of pre-feasibility study on photovoltaic electricity production facilities

**Project title:** Support to Republic of Moldova in establishment and strengthening the NDA, development of strategic framework, and preparation of country programme.

Reporting to: Team, Leader, Project Manager

**Duration of assignment:** 35 days during the period December 2019-January, 2020

Starting date: December, 2019

### **Background**

The Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) provided in 2011 in Decision 1/CP.16 for the establishment of the Green Climate Fund as an operating entity of the financial mechanism under Article 11 of the Convention.

The Green Climate Fund (GCF) was established with the purpose of making a significant and ambitious contribution to the global efforts towards attaining the goals set by the international community to combat climate change. In the context of sustainable development, the Fund will promote a paradigm shift towards low-emission and climate-resilient development pathways by providing support to developing countries to limit or reduce their greenhouse gas emissions and to adapt to the impacts of climate change.

The Fund was designated as an operating entity of the financial mechanism of the United Nations Framework Convention on Climate Change ("UNFCCC"). It is governed and supervised by a Board that has responsibility for funding decisions pursuant to the Governing Instrument for the Green Climate Fund. It is supported by an independent Secretariat, accountable to the Board, having management capabilities to execute day-to-day operations of the Fund, providing administrative, legal and financial expertise.

The Green Climate Fund (GCF) Readiness Programme, a joint partnership between UNDP, UNEP, and World Resource Institute (WRI), is a global programme to support countries for enhanced access to international climate finance. The Fund has established the Readiness and Preparatory Support Programme to provide support to National Designated Authorities (NDAs) or focal points, nominated by countries to engage with the Fund. It is a priority mechanism that will help ensure that Fund's programing is effective and country owned. The core objectives of the readiness programme are consistent with the Fund's Governing Instrument and prior Board and Conference of the Parties (COP) decisions. Within the Fund's Secretariat, the Country Programming Division (CPD) is responsible for engagement with developing countries, providing support to help countries and entities access to the Fund's resources, including through funding support from the Readiness Programme.

A Draft Agreement between the Government of the Republic of Moldova and the Green Climate Fund on the privileges and immunities of the Green Climate Fund are under consideration.

A Grant Agreement was signed 28 April, 2017 between the Republic of Moldova and GCF on implementing Readiness Programme based on commonly agreed standards policies, conditions and terms was signed. Based on this Agreement the GCF support was provided to the Climate Change Office, Ministry of

Agriculture, Regional Development and Environment of Moldova (MoARDE) to implement the activities under the Project *Support to Republic of Moldova in establishment and strengthening the NDA, development of strategic framework, and preparation of country programme.* The Readiness and preparatory support will help to establish and mandate the National Designated Authority (NDA) to engage with GCF, build the knowledge and capacities of the MoARDE team to efficiently manage GCF operational process, to efficiently communicate with Fund's board and secretariat, to access the Fund's resources and carry out the necessary due diligence. Having the strengthened NDA will help Moldova to successfully utilise direct access to GCF climate finance.

The Readiness resources will be used for the buy-in of stakeholders and strengthen the cooperation among institutions, civil society, non-profit entities, women associations and academia to develop a clear sense of climate change priorities that GCF can support. Engaging with the private sector will be a special focus of Readiness support awareness raising and training activities aiming at developing capacities for implementing innovative and transformative projects across the country. GCF climate finance will be used to support coherent, nationwide efforts for climate action and sustainable development and contribute to country's paradigm shift development in response to climate change.

Through defining of GCF specific strategic framework, the conditions will be created to move from project-based support to programmatic and strategic approaches to support from the Fund, consistent with national sustainable development plans. Establishing a country-driven, gender-sensitive and participatory Coordination Mechanism (CM) for GCF-related activities to implement Moldova's programming priorities aligned with SDGs, LEDS, NAP goals will enable the NDA for prepare capacities of stakeholders, in particular potential accredited agencies for GCF project proposals development and implementation. The NDA will enhance the understanding of Fund's accreditation and project requirements and the degree to which national entities met the requirements. Potential nominated agencies will receive support in developing funding proposals through enhanced direct access modality. The Monitoring and Evaluation (M&E) component established as part of CM and operationalized in a transparent manner will help the NDA to undertake oversight and to adjust activities to secure project outcomes and manage risks.

The project will employ a Consultant who will provide consulting services in the development of prefeasibility study on renewable energy intervention. The proposed climate intervention aims at promoting photovoltaic electricity production facilities in the Republic of Moldova for the residential and private sector.

Tasks contained in this ToR are intended to serve as minimum requirements for the National Consultant to undertake the assignment. Additional tasks that add to a greater understanding of key issues may be addressed, as necessary.

### **Objectives and scope of the assignment:**

The objective of the assignment is to develop a pre-feasibility study to test the economic, social and environmental viability of a potential climate -related intervention on photovoltaic electricity production facilities in the Republic of Moldova for the residential and private sector.

### **Expected outputs:**

- A detailed assessment of technical, economic & financial, institutional & managerial, environmental, and socio-cultural feasibility of the proposed intervention idea;
- The detailed plan for the intervention activities, including indicators of objectives and results, design specifications, required resources, the institutional structure for implementation stipulating the responsibilities of potentially involved bodies, project timing/phasing, estimated costs and a logical framework planning matrix;

- A detailed assessment of potential risks and sustainability of the intervention results after completion, based on factors ensuring sustainability of intervention.

## Responsibilities of the assignment include:

In conjunction with GCF Project Team the consultant will be responsible for:

# Carry out country context and sector analysis of the current situation in the field, providing the following information:

- the political framework on energy sector and renewable resources in Moldova (national policies, programs and implementation mechanisms), international energy treaties signed by the country, intersectoral policies.
- the relevance of intervention, driven by its consistency with the country's macroeconomic environment.
- the importance of renewable resources of energy in the national and local economy, consistency with national energy objectives.
- the institutional and administrative framework for renewable energy. Analysis of the institutional arrangement in relation to scaling up PV systems. List of organizations, agencies to be involved in the proposed intervention. Indicate the needs for capacity development related to the scaling up of PV systems, other institutional needs.

### Perform economic and financial analysis:

- Evaluation of the data availability for the climate intervention of the project regarding the potential to develop financing mechanisms for renewable energy projects, especially photovoltaic ones;
- Undertake a theoretical and empirical evaluation of the solar potential in the Republic of Moldova;
- Evaluation of the potential of implementing the support mechanisms for building photovoltaic installations in the residential and private sector, taking into account the support schemes;
- Undertake calculation of the total GHG emissions and their costs per tone (\$/tCO2e).

## Provide estimated costs of the intervention and financing plan based on:

the expenditures (USD and MDL) per total required to implement the investment in accordance with the assessment carried out and (i) separately on each component, grouped according to the major milestones/outputs of the intervention, (ii) design, technical assistance and supervision expenditure during the implementation (iii) publicity and media coverage if necessary, including those incurred in public procurement procedures.

# Undertake socio-economic (including vulnerability to climate change) and financial analysis of the intervention based on:

- analysis of proposed PV systems capacity, taking into account placement, supply, losses.
- financial analysis for recovery of the entire investment (without taking into account the manner and sources of financing),
- financial analysis for recovering the invested capital (taking into account the financing structure),
- Net Present Value/ENPV, Financial Internal Rate of Return (FIRR), cost/benefit coefficient, investment recovery term,
- the necessary actions taken by the government and the private sector to be carried out until the project end date and during the implementation of the project,
- the final financial analysis must reflect the recovery of the entire investment (without taking into account the manner and sources of funding),
- analysis of job creation, boosting entrepreneurial activity at local level,

- analysis of the accessibility of new services provided for vulnerable groups in rural areas,
- assessment of the overall impact of the intervention on the welfare of all the citizens of the country,
- analyzing gender equality in the implementation of project activities as well as accessibility to new services and opportunities created by the implementation of climate change intervention,
- estimation of the degree of climate vulnerability reduction of communities that will benefit from the established PV systems,

Apply other economic and financial estimations as appropriate.

### Describe the sustainability of the intervention based on:

- indication to what extent the political and regulatory framework contributes to the sustainability of the proposed intervention or the need to implement new policies and regulations,
- the extent to which the proposed technological approaches are compatible with the operational standards in the country and compared to the international ones,
- the extent to which the impact of the project on people/communities, land use, water, air, flora and fauna, cultural heritage is in line with approved environmental standards and practices,
- the extent to which the potential project is in line with existing socio-cultural norms and takes into account gender equality,
- the degree and effectiveness with which the institutions/agencies involved (public and private) are fulfilling their responsibilities.

### Indicate the risk factors in intervention implementation:

Perform an objective analysis of the risk factors that may influence the estimated performance and jeopardize the implementation of the project: (i) which may influence the investment costs; (ii) which may influence the elements of the forecasted cash-flow (prices or tariffs of products, services, utilities or raw materials, labor costs and interest rates, etc.) (iii) systemic risks that may affect the activity of all participants in the intervention; (iv) specifics of investments in water resources, (v) other identified risks.

Identify and recommend other effective ways of addressing risks.

## Describe how to monitor and evaluate climate intervention implementation by:

- Developing key indicators to monitor the implementation progress, results, activities, sustainability and impact of the project,
- Intervention and post-intervention evaluation timetables,
- Other.

## Conclude and make recommendations relevant to the implementation of the potential intervention.

Nr	Deliverables	Time
1.	Developed detailed Work Plan for the assignment.	December 2019
2.	First draft of the pre-feasibility study	31 December 2019
3.	Stakeholder consultation and coordination of the draft with Moldova GCF NDA (Ministry of Agriculture, Regional Development and Environment)	January, 2020
4.	Final version of the pre-feasibility study	31 January 2020

### **Organizational arrangements:**

The selected Consultant is expected to work in a close cooperation with project tram and the PIU. The consultant shall work under the guidance of the Team Leader. In carrying out the assignment, the Consultant is required to employ a collaborative approach in ensuring that inputs are obtained from a wide number of stakeholders that relate to project area.

## Financial arrangements:

Payments will be disbursed according to contractual terms and conditions.

### **Qualification Required:**

- Advanced university degree in energy and related sciences, economy or similar field or equivalent working experience in the area;
- At least 10 years of progressively responsible professional experience in energy sector, including at least 3 years of experience in conjunction with climate change;
- Knowledge of institutional mandates, policies related to energy and climate;
- Excellent proven skills in analysis, leadership and overall diplomatic skills;
- Proven experience on preparation of written materials, project proposals, concept notes, reports for international donors:
- Good organizational, time management and facilitation skills;
- Ability to integrate different experiences, methodologies, and approaches from a diverse range of stakeholders, organisations, and technical experts from energy and related sectors, through adapting facilitation techniques;
- Good knowledge of energy sector of oldova;
- Good level in written and spoken Romanian and English is required for this assignment.

Climate Change Office, MoARDE is committed to workforce diversity. Women, persons with disabilities, persons living with HIV are encouraged to apply.

## **Documents to be included when submitting the proposals:**

- Personal CV including past experience in similar projects.
- Cover Letter
- Financial Offer

Interested persons should submit their documents by 20 December 2019 to the following address:

a) By Mail: 156A, Mitropolit Dosoftei St., MD-2004, Chisinau, Climate Change Office of the

Ministry of Environment, off. 37 b) By E-mail: adapt@clima.md

c)By fax: 022 23 22 47.

Only those shortlisted will be contacted.

### **Evaluation:**

The Consultant will be evaluated based on the qualifications and the years of experience, as outlined in the qualification section. The evaluation will consist of:

- technical Criteria weight: 70%.
- financial Criteria weight: 30%.

Only the highest ranked candidates who have obtained a minimum 70% on the technical evaluation will be considered for the financial evaluation.