



*Empowered lives.
Resilient nations.*

Annex 1

Terms of Reference

Building More Vibrant & Resilient Cities: Incentivizing Innovation, Investment and Civic Engagement for Clean Energy Production & Consumption (multi-country Moldova, Georgia, Serbia and Tajikistan).

Access to relatively inexpensive energy is essential for the functioning of modern and productive economies. Regionally, Moldova, Tajikistan, and Serbia are largely dependent on imported energy, while Georgia lacks diversification in its energy sources. In Moldova 74% of energy is imported, in Georgia 80% of the electricity comes from HPPs, and Serbia imports about 34% electricity needed. Electricity shortages in Tajikistan occur in over 60% of the country during the winter period. On this background, increasing access to renewables in these countries would offer significant opportunities for energy efficiency and technological diversification of energy sources, thus improving energy security and providing further economic benefits.

In this context, there is a vast, untapped potential for harnessing solar photovoltaic energy, as the technology has only recently begun to take off, due to high equipment costs and very limited experiences in participating countries. These four countries face limited or non-existent investment incentives, including in particular feed-in-tariffs (FIT). For this reason, it is necessary to test and implement new models of financing solar energy generation, such investments from ordinary citizens and private sector via crowd-investing for the benefit of wider population. Also taking in consideration urbanization, urban-rural migration cause the increased pressure on energy resources but also as an opportunity for investment and diversification of energy sources.

This activity is part of a wider regional initiative, design to make Chisinau, Tbilisi/Rustavi, Belgrade and Dushanbe smarter and more livable as cities.

II. Project Background Information

UNDP Moldova Innovation Unit is leading on the abovementioned regional initiative and intends to install minimum two solar trees / palms in public places of the City of Chisinau.

By installing solar trees in the City of Chisinau, we hope to primarily emphasize the opportunities and benefits of solar energy as well as bring citizens together around the installations. The installations will have two-fold purpose, solar energy awareness raising and community bonding.

- We foresee a low risk of vandalism and intentional damage to the installations (especially due to a high visibility of the installations; high exposure level; CCTV camera)
- We foresee a low risk of a technical issues
- Low replicability potential from the municipality due to high equipment cost

III. Duties and responsibilities:

- Delivery and installation of two solar trees in designated locations in the city of Chisinau
- Provision of training on how to operate the tree and its components
- Provision of a warranty on all parts of the tree (can be of a different warranty period)

IV. Expected Deliverables and estimated timing

#	Deliverables	Estimated timing
1	Submission of design and technical specification of solar tree.	By December 27, 2018
2	Manufacturing of two identical solar trees as per agreed design with the UNDP and presenting pictures and technical documentations related to trees.	By February 28, 2019
3	Delivery and installation as per agreed locations in Chisinau (2 Weeks).	By March 15, 2018
4	Testing (1 week)	By 22 March, 2019

V. Institutional arrangements:

The contractor will work under the direct supervision of the GCL Project Manager. The contractor shall take overall responsibility on the quality and timeliness of the assessment process within its competency. The contractor is responsible for the compilation and editing of the draft material, presentation and the final product in English language. The GCL Project Manager and, GCL Project Officer, will provide the contractor with the necessary information and materials and/or will facilitate the communication with the relevant public authorities for obtaining the necessary information to ensure the successful completion of the assignment.

- **Staffing**

The company shall indicate lead experts per areas of expertise. If the qualifications of certain expert correspond to the requirements of more than one area of expertise, than the expert can be proposed for that respective area, too. The number of planned man-days per expert/area of expertise need to be indicated in company's proposal. Failure to provide adequate expertise in all areas of expertise is considered grounds for disqualification. The Company will ensure that all other necessary staff and additional technical resources required for efficient finalization of the work will be provided (e.g., logistical support for organizing various meetings and conducting field work).

- **Timeliness and quality**

The contractor's performance shall be assessed based on timeliness and quality of services. The contractor shall be notified of any deviation from the agreed schedules and standards, pursuant to which it will be required to remediate its performance. In case no satisfactory remediation shall be obtained UNDP reserves the right to terminate the contract.

- **Language**

The feasibility study and the all the complementary documents shall be prepared in English. The final and interim reports/and/or documents shall be submitted in English.

- **Legal and other requirements**

The content of the requested documents shall conform to the pertaining relevant legislation in the country and the international best practices and models.

- **Methodology**

Interested bidders should provide information on the name of expert(s) per area of expertise and the total number of working-days for each expert allocated for each area of expertise. The Contractor will ensure that all other necessary staff and additional technical resources required for efficient finalization of the work will be provided (e.g., logistical support for organizing various meetings and conducting field work).

- **Additional costs**

The company should calculate the possible costs associated with the current assignment such as staffing, transportation, logistics, acquiring various maps, layouts and other relevant documents or information required for successful finalisation of all tasks. UNDP shall not accept any additional expenses which are not included in the company's financial offer.

- **Submission of data, reports and other material produced**

All primary data, reports, and other documentation produced during this assignment shall be made available to UNDP in appropriate electronic format (word, excel, PDF, etc.) depending on the nature of its content. All data acquired, and products developed in the course of the assignment will be in the ownership of UNDP and cannot be used by the Contractor and its team without prior written permission.

- **Cooperation requirements**

The company is expected to work closely with other experts from UNDP on parallel/complementary activities.

- **Consultations process**

The responsibility for facilitating the consultation process for the purposes of completion of tasks outlined hereto will be primarily responsibility of the Contractor.

- **Payment**

Payment for services shall be provided in two instalments as follows:

1. 20% of contract cost – After Submission and approval of design and technical specification of solar tree. ;
2. 70 % of contract cost – After Delivery and installation as per agreed locations in Chisinau (2 Weeks)
3. 10 % of contract cost - After Testing delivered in installed equipment.

Duration of the Work

Duration of work since the signing the contract between the client (UNDP) and the vendor is expected to be maximum of 3 months. If the goods and services are not delivered within this timeframe, UNDP will exercise its right to withdraw from the contractual conditions and claim the deposit back.

3 months are expected to cover the entire delivery cycle from manufacturing of the two solar trees to transportation of finished products, their installation in Chisinau and final testing of all the features and functions.

Duty Station

For the purpose of this project, the UNDP Moldova is seeking an interest from a global pool of companies, however regional market is a preferable option as the price of transportation of the final products makes a significant portion of the total cost as well as a close geographical proximity will speed up the entire delivery process.

UNDP Team will require a precise schedule of delivery and installation of both solar trees as at least 1-2 members of the Project Team will be present during the installation for an oversight and consultations.

V. Qualification requirements:

- ✓ **Corporate experience:**
 - At least 3 years of experience in developing and building and installation of solar trees;
 - Minimum 2 delivered and installed until fully functional solar trees;
 - EU certification of developed solar installations;