

TERMS OF REFERENCE

Consultancy: Implementation of the solarization works in the two-pumping station in Harouf and Habboush, in Nabatiyeh District.

I- Background for this consultancy

The provision of public water supply in Lebanon is rapidly deteriorating due to unavailability of energy from EDL/EDZ and rising cost of private generators. With a total shutdown of public electricity supply from EDL/EDZ and the continued increase of fuel prices (almost tripled between September 2021 - USD 56 cents/liter - and June 2022 - nearly USD 1.3 cents/liter) Public water stations will struggle to keep business continuity which will effectively make water unaffordable for a large proportion of the Lebanese and non- Lebanese households. AVSI, in collaboration with the South Lebanon Water Establishment (SLWE), municipalities, and local communities conducted a rapid need assessment which highlighted the following unmet and urgent needs in Nabatiyeh District:

Harouf (Sekran) and Habboush (Chreifeh) water pumping stations are fully reliant on fossil-based energy (public and private) but have public land available to ensure transition to solar system. At present, both Harouf and Habboush water stations are underserving their communities which rely on these water systems to access water. A total of 8,600 individuals and six schools (public, semi-private, private) are served by these two water stations.

II- Scope of work

The consultancy is collocated within Output 1.1 of the project: the most vulnerable in hosting and displaced communities have access to sufficient quantity of quality, reliable and equitable water.

The proposed intervention, on the Habboush (Chreifeh) and Harouf (Sekran) pumping stations, consists of the installation of a 138.6 KWp and 130.9 KWp PV solar systems respectively, in line with the standards set by the SLWE. The Municipalities of Habboush and Harouf secured public lands to SLWE for solar system installation. AVSI discussed and agreed on the proposed intervention with representatives of the South Lebanon Water Establishment (SLWE) responsible of Nabatiyeh and South Governorates, and with Habboush and Harouf Municipalities.

III- Expected outputs and deliverables:

Activity	Description	Estimated duration to complete	Review and approvals required
Technical	- Validate the BOQ of the Solar PV system	Within first two	Project manager
Assessment	and design the PV system and shop drawing	weeks	
	 Participation to the contractor's selection committee with the technical evaluation of the offers received. Supervise the overall operation: site inspection and in-depth assessment, PV system design, installation works supervision. Reporting on site supervision following frequent site visits, thus in addition to checking the materials submittals and shop drawings. Work closely with the Engineering Department of the South Lebanese Water Establishment in order to comply with ministerial and sector standards for the solar system installation 	6 months	Project manager



TERMS OF REFERENCE

Monitoring and control	 Regular (weekly frequency) follow up of the works with visits to the sites and ad hoc meeting with the SLWE and contractors. Track and record the BoQs follow up; quantity and quality control of the material used and work progress. Together with the MEAL department and the project manager, participate in the definition of the monitoring tools for the work. Biweekly follow up meeting with the project manager. Validate the quantities and quality of materials used on site versus BOQs agreed with SLWE and the contractor's contract. Final quality and quantity control to ensure the handover of the works for the SLWE 		Project manager
Reporting	 Provision of midterm and final narrative report coupled with all technical supportive documents. 	By the end of the 3 rd month and at the end of the consultancy period	Project manager

IV- The Consultancy Details

- Time and Place

The consultancy is expected to start by November 10th 2022 and end by May 10th 2023.

The area of implementation will be Nabatiyeh District, in particular Habboush and Harouf Districts will be the target of the solar system intervention.

- Language for the delivery of the consultancy

The working languages for the consultancy are English and Arabic. As for the field visit and the relations with partners must be held in Arabis. As for the meetings, it is recommended to be facilitated in Arabic or English. All materials and supportive documents must be and remain accessible online for AVSI project staff.

- Consultant's profile

Consultant should have the following profile:

a) **Education**: Advanced University degree in Engineering, notably in Electrical, mechanical, environmental or civil engineering.

b) Specialist skills/Workshop:

- Good writing and communication skills with ability to present ideas and concepts concisely in written and oral form is required
- Demonstrated experience in facilitation skills.
- Be able to work under minimum supervision and to meet tight deadlines

c) Years of experience:

- Minimum 5 years of experience
- Thorough experience working in Solar Panels systems
- Experience working with marginalized communities
- Very good knowledge about the Lebanese Water Establishment functioning and mechanisms.
- Experience with the projects in the Public Sector and Public infrastructure
- d) Competencies:



TERMS OF REFERENCE

- Core competencies: communication, drive for results, working with people
- Technical Competencies: Formulating strategies and concepts, analysing, relating, applying technical expertise.
- e) Languages required:
- Fluency in oral and written English and Arabic (workshops will be delivered in Arabic)

V- Documents to be submitted for the selection

Please refer to section 4 of the Request For Quotation

VI- Terms of Payment

The consultant is expected to be paid part-time (at 50%) on a monthly basis in USD, the monthly cost is in line with the level of experience, being a senior engineer with experience in the solar system domain.

VII- Risks

The Consultant (including the team of monitors and facilitators) must respect the conditions mentioned in the AVSI security and safeness policy in case of not having their own policy.

AVSI is committed to diversity and inclusion within its workforce, and encourages qualified female and male candidates, from all religious and ethnic backgrounds, including persons with disabilities, to apply for this opportunity.