REQUEST FOR EXPRESSION OF INTEREST

Renewables And Battery Energy Storage Program for Mauritania

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Country: Mauritania

Description of procurement:

Mauritania's electricity and gas market is based on a “single buyer” system, with the state-owned national power utility at its center. As a vertically integrated utility, the Société Mauritanienne d'Electricité (SOMELEC) is responsible for the key electricity service functions, including generation, systems operation, transmission, and distribution. The electricity sector in Mauritania has benefited from significant investments in power infrastructure, particularly in generation and transmission systems, with an increasing share of renewables. The total installed power capacity is 549 MW, out of which 505 MW is available. In addition, there is installed a 188 MW captive generation by mining industries. Mauritania has surplus capacity to export to Senegal and Mali (up to 60 MW in 2017). Exports vary from year to year and can represent a sizeable share of the national utility's revenues). The growing share of renewable energy in the energy mix has had a beneficial effect on SOMELEC's cash flow thanks to the reduction on fuel costs. Renewables generation includes (i) a 30 MW wind power plant in Nouakchott (2017), (ii) two solar plants of 15 MWp and 50 MWp in Nouakchott commissioned in 2013 and 2017 respectively, (iii) a 100 MW wind power recently commissioned in Boulenouar, and (iv) the shares of Mauritania in the Manantali hydro plant (30 MW) and Felou hydro plant (18 MW), both of which are in Mali. Mauritania has an important transmission network program under implementation aimed at increasing export (225 kV line Nouakchott-Saint-Louis) and supplying mining industries (225 kV line Nouakchott- Akjoujt - Zoueiratt). However, the Mauritanian power sector is faced with significant financial challenges due to the subsidized energy tariffs, deteriorating technical and commercial performance (technical and commercial losses reached 35 percent in 2021), increased fraud, low collection rate (approximately 65 percent in 2021) and difficulties to recover unpaid bills, and is in need of stronger utility performance.

To allow for a sustainable deployment of RE, the Government needs to develop a technically, socioeconomically, and legally adequate plan. To ensure sustainability from a technical standpoint, the sites selected by the Government must be adequate regarding the grid strength. In addition, IPPs need to have a clear plan with bankable and legally clear parameters. Renewable Energy (RE) deployment can also be the basis for strong socioeconomic development by becoming a key sector, particularly by fostering stronger industrialization in manufacturing RE and BESS equipment, which is currently non-existent in Mauritania and develop the associated sector services.

Scope of Work:
Within the context of the World Bank’s support to the Government of Mauritania in accelerating the country’s energy transition via wind, solar, and battery energy storage deployment, the

overall objective of this assignment is to support the World Bank in providing advice to develop bankable, sustainable, and dispatchable renewable energy with battery energy storage (RE+BESS) park tenders. More precisely:

- Activity 1 aims to provide technical advice to support the selection of sites for RE+BESS development and carry out pre-feasibility studies for at least 12 utility-scale RE+BESS plants, with a minimum capacity per site of 20 MW and a minimum total capacity for all sites of 500 MW dependent on resource and land availability.
- Activity 2 aims to maximize socio-economic benefits of developing (i) a RE+BESS IPP Program and (ii) a Green Hydrogen Program. Benefits will be assessed regarding the country's industrialization of wind power, solar power, BESS, and other items related to Green Hydrogen as well as measures needed for maximizing skills development and creating local jobs, emphasizing gender equality at all stages of the deployment of RE+BESS projects.
- Activity 3 aims to develop a comprehensive RE+BESS IPP Program in Mauritania, looking specifically at the legal, procurement, and technical aspects.
- Activity 4 aims to develop a Grid Code for Mauritania to be "RE friendly" and to contain the latest developments and good practices for power systems with high shares of variable renewable energy.

Eligibility Criteria:

The Consultant is expected to be a consortium of a technical, financial, and legal firm/consultants with extensive experience in

(i) technical expertise, specifically on RE+BESS generation
(ii) RE+BESS competitive tender (procurement, technical, financial, and legal aspects)
(iii) socio-economic development expertise for RE+BESS projects.

The Consultants are expected to have an experience in Mauritania via the consortium or specific consultants added to the proposal.

For more information about technical details and requirements, please email to info@tenderingprojects.es