



مشروع طاقة الرياح



THE REPUBLIC OF SUDAN

**MINISTRY OF WATER RESOURCES, IRRIGATION AND
ELECTRICITY**

WIND ENERGY PROJECT

Promoting Utility Scale Power Generation from Wind Energy

Request for Proposal for

Consultancy Service for

**DEVELOPMENT OF SECONDARY LEGISLATION RELEVANT TO
RENEWABLE ENERGY FOR CATALYSING PRIVATE SECTOR IN-
VESTMENT**

(Term of Reference)

July 2018



**TERMS OF REFERENCE
FOR
DEVELOPMENT OF SECONDARY LEGISLATION RELEVANT TO
RENEWABLE ENERGY FOR CATALYSING PRIVATE SECTOR IN-
VESTMENT**

**A. Project Title: “Promoting Utility Scale Power Generation from
Wind Energy”**

B. Project Description

Like many developing countries, Sudan suffers from a shortage of electricity. Approximately 35% of the population have access to electricity. Even then, supply is not reliable and experiences regular outages and even system blackouts. Hydro-power has the largest share of energy generation. The potential to expand hydro-power to meet future needs is limited. Sudan does not have significant oil or gas production and as a result will have to turn to importation of fossil fuels to meet future energy needs. Currently some 800MW gas turbines are being constructed at Garri northern Khartoum and Port Sudan to bridge the present power shortage gap. As an interim solution for the power shortage, the Ministry of Water Resources, Irrigation and Electricity has hired a floating 150MW power plant at Port Sudan. On another side climate change threatens to affect rainfall patterns in the region on which Sudan relies for the water that generates its hydro-power as well as rain-fed agriculture. Considering the hydropower seasonality and the uncertainties surrounding the availability and price of oil products, this further emphasises the need for Sudan to diversify its energy sources.

Sudan currently has a power generation capacity of about 3,500 MW, has no wind generation capacity and no grid-connected solar capacity. Sudan power system responsibility is being undertaken by government-owned companies of the power generation, transmission and distribution networks. The Electricity Regulatory Authority (ERA Sudan) is undertaking the responsibility of the power sector regulation. Sudan transmission grid consist of 965 km of 500 kV transmission lines, 5,984 km of 220 kV transmission lines and 1057 km of 110kV transmission lines . In 2017, the power consumption per capita was 325 kWh/ year. There are no independent power producers (IPPs) in the country -except for a small scale diesel power plant in Niyala-, though initiatives are underway to promote private investment in power generation. Former National Electricity Corporation had previous experience in this respect by establishing an IPP department within its structure. Although some IPP agreements have been concluded, they could not be implemented due to the absence of the legal framework. This wind energy project seeks to support those initiatives where they relate to wind power.

The Wind Energy Project is a Government of Sudan/UNDP/GEF initiative for the development of grid connected wind power generation in Sudan and part of its activities is supporting the development of policy and regulatory framework that encourages private sector investment in renewable energy based power generation. The second outcome of the wind energy projects is



“Renewable Energy Policy, Institutional, and regulatory framework” including the preparation of the Independent Power Producer (IPP) and Public Private Partnership (PPP) Acts and regulations.

The wind project Executing Entity/Implementing Partner is The Ministry of Water Resources, Irrigation & Electricity (MWRIE) Implementing Entity/Responsible Partners are Ministry of Environment, Forestry & Natural Resources, General Directorate of Energy Affairs - Ministry of Petroleum, Higher Council for Environment & Natural Resources and National Energy Research Centre – Ministry of Sciences and Communications.

In addition to that there are some other important stakeholders such the Ministry of Finance and Economic Planning, Ministry of Investment, Central Bank of Sudan and Ministry of Justice.

All the mentioned above institutions will be referred to as stakeholders in the rest of the documents.

In geographical terms the Wind Energy Project is targeting Dongola wind project northern Sudan as the baseline location to be followed by the Red Sea coast as the first replication. In the meantime meteorological data collection are underway in other potential areas covering the Northern State and South Darfur State western Sudan which are the future targets in the long term planning of wind power application in Sudan.

The baseline wind power plant represents the first of its kind in the country and as such tangible efforts are needed to make a success out of it, as any failure will represent a setback to any future efforts in grid connected renewable energy projects. Therefore, the project is following a holistic approach whereby all technical and non-technical issues surrounding the project are carefully addressed and a wide scale stakeholder involvement is ensued. This includes hardware design, planning and installation, metrological data collection, analysis and mapping, land ownership, effect on local communities, effect on migratory soaring birds and ecosystem in the project areas.

On the regulatory side ERA Sudan is currently preparing the legal and regulatory frameworks to ensure clarity and transparency of the sector (Energy Efficiency, Renewable Energy and Amendment to Electricity 2001 Acts have been drafted). ERA has also prepared Sudan Grid Code for transmission and Sub Codes for Distribution, Renewable Energy, and Nuclear which has been later updated by The Wind Energy Project and promulgated by ERA Sudan. ERA has also commenced a separate study on the cost of electricity and the tariff structure for Sudan power system including the Feed-in Tariff, the first draft of which has been issued.

Accordingly under this assignment the Wind Energy Project (WEP)/MWRIE intends to hire the services of Consultancy firm with vast experience in development of secondary legislation relevant to renewable energy for catalysing private sector investment

C. Objectives:

1. Contribute in increasing the electricity access in Sudan through private sector investment projects.
2. Attract both foreign and local investors to enter into private sector investment projects by building confidence in the overall legislations in Sudan.
3. Increase the understanding of utilities on the contribution of private sector investments in reducing shortfalls and disruptions in electricity supply and encourage



- the development of renewable energy share.
4. Support the Government's efforts in establishing a sound legal framework to alleviate the weaknesses in the current rules and procedures for the development of legislations framework, leading to increase and sustain the private sector investment and hence to improve service provision in the country.
 5. Build an understanding of the power market in the private sector, contribute to the modernization of the economy, create sustainable markets and jobs, and to provide best practices.

D. Scope of Work

WEP/MWRIE is seeking the services of Consultancy firm with vast experience in the development of secondary legislation relevant to renewable energy developed for catalysing private sector investment in Renewable energy projects.

The scope of the consultancy should include, but not limited to:

1. A diagnostic review of the current legal and regulatory rules and procedures relevant for private investment in power sector including, but not limited to: Electricity Act 2001(amendment 2018), Investment encouragement Act 2013, Companies law 2015, PPP draft Act (prepared by Ministry of Finance) as well as the role of the key institutions involved, including all the stakeholders and its influence on the private sector projects.
2. Determine the roles and responsibilities of different stakeholders emphasizes the importance of ERA role as well as the procedures that must be followed regarding the preparation and implementation of transactions so as to enhance the transparency and sustainability of private sector projects.
3. Development of by-laws to foster the investment in the Renewable Energy through the adoption of the PPP draft Act (prepared by Ministry of Finance).
4. Establishment of an IPP by-laws which should follows the international practice and is expected to cover but not limited to the following aspects:
 - a. Consider the excess energy produced by Auto generators.
 - b. Establishment of special purpose vehicle (SPV) for any IPP project.
 - c. Land lease agreements including the concession period.
 - d. Provision of subcontracting (subcontracting and assignment and novation)
 - e. Complete feasibility study (Technical and Environmental)
 - f. Sale of electricity.
 - g. Auditing and inspection and validation of plant capacity.
 - h. Offences and penalties.
 - i. Legal concerns including any arbitration mechanism.
 - j. Any other issues felt to be of significant.
 - k. Propose licensing mechanisms and timeframes (interval of IPP license reassessment).
5. Suggest an amendment to Renewable energy (draft) Act and Electricity Act 2001 to include reference to Renewable IPP and PPP By-laws and to have incentives to encourage the investment in Wind Energy.



6. Establishment of guidelines for the use of the FiT, IPP, PPP rules and other mechanisms to support private sector. This guidelines should be demonstrated in flow charts to present the whole stages with emphasizing on IPP license process and IPP project contractual relationships.
7. Borrow regional and international experience in Renewable Energy regulations and customize to Sudan condition.
8. Suggest any additional component to this TOR document to fill any gaps on the available documents.
9. Identify capacity building development requirements for relevant stakeholders to have suitable knowledge for implementation of the IPP, PPP and Pro-wind investment By-laws and their utilizing mechanisms.
10. Provide awareness workshop in Khartoum for all stakeholders including the private sector to agree on IPP and PPP By-laws.
11. All deliverables should be in Arabic language.
12. Translation of the final approved document to English language.

E. Expected Outputs and Deliverables

Deliverables / Outputs	Estimated Duration to Complete	Due Dates	Submission Requirements	% of Payment	Review and Approvals Required
An Inception report for the revision of current legal and regulatory rules and procedures. And identification of additional work needed to produce the final documents mentioned in the scope of work (items no. 3, 4, 5, and 6).	15 working day	Within 15 working days from the commencement of the contract.	Inception Report	Nil	Project manager
Draft report for the above mentioned document scope of work (items no. 3, 4, 5 and 6).	30 working days	Within 45 days from the commencement of the contract	Draft Report	25%	Project manager
Presentation to the project stakeholders and getting comments.	1 working days	Within 46 days from the commencement of the contract	Presentation to get comments	Nil	Project manager
Provide awareness workshop in Khartoum for all stakeholders including the private sector to agree on IPP and PPP By-laws	2 working days	Within 48 days from the commencement of the contract	Training workshop	25%	Project manager



- Submission of the Final revised version for the above mentioned documents scope of work (items no. 3, 4, 5 and 6) in Arabic and translation copy in English language.	14 working day	Within 62 days from the commencement of the contract	Final revised version	50%	Project manager
---	----------------	--	-----------------------	-----	-----------------

F. Institutional Arrangement:

The consultant will work under the supervision and guidance of UNDP, the Wind Energy project through a project team comprised from WEP, ERA and MWRIE

G. Duration of the Assignment:

The assignment is for 62 working days.

The assignment is expected to start on 1st September 2018 and concluded not later than 1st December 2018.

H. Duty Station

The consultant duty station during the presentation and the training workshop is Khartoum and working exclusively with the project team.

I. Qualifications:

The consulting firm should present:

1. Complete firm profile with demonstrated experience in Power sector regulations formulation such as IPP act, PPP act, and Electricity act. Including the project team members CVs.
2. Experience in formulating legal frameworks that dealing with national stakeholders.
3. Work experience in countries with similar conditions, especially in the African and Arab countries context, is an advantage.

J. Scope of Financial Proposal and Schedule of Payments

The proposal shall be based on Daily fees and all-inclusive payable as follows:

- 25% on completion and submission of Draft report.
- 25% on completion and conducting a presentation to the stakeholders.
- 50% on receipt and acceptance of the Final documents.



K. Recommended Presentation of Offer

Interested consultants shall present:

- L. Duly accomplished Letter of Confirmation of Interest and Availability.
- M. Personal CV, indicating all past experience from similar projects, as well as the contact details.
- N. Methodology of implementing the assignment.
- O. Financial Proposal that indicates the all-inclusive fixed daily

P. Evaluation Criteria and selection of the consultant:

The selection of the prospective consultant will be based on the combined weight of:

- Qualifications and methodology 70%.
- Financial offer 30%;

Assessment Criteria	Maximum Obtainable Points	Weightage (%)	Evaluated Points Obtained by the Offerors		
			A	B	C
Methodology					
The completeness of the proposal and the comprehensiveness of the methodology.	10	14%			
The work plan schedule and timeline to complete the study.	10	14%			
Qualification					
Firm profile.	15	21%			
Experience in Power sector regulations formulation such as IPP act, PPP act, and Electricity act.	20	30%			
Project team members CVs.	10	14%			
Work experience in countries with similar conditions, especially in the African and Arab countries context.	5	7%			
TOTAL	70	100%			