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دولة ارتريا  
وزارة الطاقة والتعدين  
قسم الطاقة

THE STATE OF ERITREA  
Ministry of Energy and Mines  
Department of Energy

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Date 16 | 02 | 06

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Ref. 06.12 | 13 | 07 | 06

SUBJECT: Request for Expression of Interest

Country: Eritrea  
Project Title: Wind Energy Applications in Eritrea  
Sector: Energy  
Project Code: 00031458

The Department of Energy (DoE), Ministry of Energy and Mines of the State of Eritrea, has commenced a Wind Energy Applications Project funded by the Government of Eritrea (GoE) and the UNDP/GEF. Part of this project entails the supply, installation and commissioning of small wind turbines (3 kW to 30 kW capacities) for water pumping and rural electrification of seven villages in Eritrea, listed below, and also identified in the attached location map.

The DoE is therefore issuing this letter to invite companies, manufacturers, integrators, or joint ventures to e-mail or fax back the attached one page FORM to express your interest to bid for the entire project or part of the project as summarized below:

**The project scope categorized by capacity is:**

**1. Three - 30 kW Wind Turbines for Wind-Diesel Hybrid Operation –**

One 30 kW wind turbine will be installed in each of three villages namely Berasoli, Rahaita and Haleb, on the southern coast of Eritrea. All three villages are remote off-grid sites. These three villages will have the wind systems integrated with existing or planned diesel generator/s to provide hybrid wind-diesel systems. Each site will have a minimum of 80 kW in Diesel generator/s for base load and the wind turbines will be connected to the diesel generated system to offset the use of fuel.

**2. Two- 10 kW Stand Alone Wind Turbines –**

Two remote off-grid village sites require one 10 Kw stand-alone wind turbine each. The villages are Gizgiza in the northern part of Eritrea and Beilul in the southern coast.

**3. One – 5 kW Stand Alone Wind Turbine -**

One 5 kW wind turbine is to be installed in Gaharo, to supply electricity to a small remote off-grid village with less than 90 households. The houses are widely dispersed and not clustered.

**4. Two –Wind Water Pumps –**

The village of Gaharo, a remote off-grid site located in the southern coast will require one 3 kW electrical wind water pump. The village of Dekemhare, in the central part of Eritrea will require a mechanical wind water pump that is approximately rated to an equivalent capacity of 3 kW.

The table below lists the desired type of renewable energy configuration for each village, the proposed size of wind generation required in kW, the number of households existing in each village, and the typical average annual wind speed in meters per second recorded for each village.

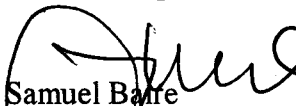
RE Type	Village Name	Minimum Wind Generation kW	Number of Households	Average Annual Wind Speed
Wind-diesel Hybrids	Berasoli	30	108	6.8 m/s
	Rahaita	30	117	6.8 m/s
	Heleb	30	200	7.3 m/s
Wind Stand alone	Beilul	10	198	5.8 m/s
	Gzgiza	10	225	6.2 m/s
	Gaharo	5	99	7.0 m/s
Wind Water Pump	Gaharo	3	99	7.0 m/s
	Dekemhare	3 (equivalent)	30	6.0 m/s

Interested bidders who respond to this Expression of Interest, will receive a bid package which includes detailed information on each of the village sites, and a request to supply us with your capabilities and capacities of the available wind turbines and the level of support that will be provided to implement the Eritrea Wind Energy Project.

Please respond to this request, by E-mail or Fax, to Eng. Abiy Ghebremedhin, National Project Manager for "Eritrea Wind Energy Project" within February 2006.

Eng. Abiy Ghebremedhin Desta  
 Project Manager  
 Eritrea Wind Energy Project  
 Ministry of Energy and Mines  
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 E-mail: abiywindp@yahoo.com,

Warmest regards,

  
 Samuel Baire  
 Director General  
 Department of Energy

